REVISED BASELINE
ECOLOGICAL RISK ASSESSMENT

SAUGET AREA 2 SITES
(SITES O, P, Q, R, AND S)
SAUGET, ILLINOIS

VOLUME I

REPORT

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LIST OF ACRONYMS AND ABBREVIATIONS

ABRTF	American Bottoms Regional Wastewater Treatment Facility
ADD	Average Daily Dose
AOC	Administrative Order on Consent
ATSDR	Agency for Toxic Substances and Disease Registry
AUF	Area Use Factor
AVS	Acid Volatile Sulfide
AWQC	Ambient Water Quality Criteria
BAF	Bioaccumulation Factor
BCF	Bioconcentration Factor
BERA	Baseline Ecological Risk Assessment
BSAF	Biota-Sediment Accumulation Factor
BW	Body Weight
C	Concentration
Cfs	Cubic Feet per Second
CNS	Central Nervous System
COPEC	Contaminant of Potential Ecological Concern
CSM	Conceptual Site Model
Dbh	Diameter at Breast Height
DDA	Downstream of Plume Discharge Area
DHU	Deep Hydrogeologic Unit
DO	Dissolved Oxygen
DW	Dry Weight
Eh	Oxidation-Reduction Potential
EPC	Exposure Point Concentration
ERA	Ecological Risk Assessment
ER-L	Effects Range - Low
ER-M	Effects Range – Median
FAC	Facultative Plant
FACU	Facultative Upland Plant
FACW	Facultative Wetland Plant
FS	Feasibility Study
FW	Fresh Weight
GI	Gastrointestinal
GPD	Gallons Per Day
HQ	Hazard Quotient
IR	Ingestion Rate
K_d	Inorganic Adsorption Coefficient
K_{oc}	Organic Carbon Partition Coefficient
K_{ow}	Octanol Water Partition Coefficient
L/d	Liters Per Day
LC_{50}	50% Lethal Concentration
LCV	Lowest Chronic Value
LOAEL	Lowest Observed Adverse Effects Level
LEL	Lowest Effects Level
LOEC	Lowest Observed Effects Concentration
MATC	Maximum Acceptable Toxicant Concentration
MCPP	2-(4-Chloro-2-methylphenoxy)propanoic acid

LIST OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

MFO	Mixed Function Oxidase Enzymes
MGD	Million Gallons per Day
MHU	Middle Hydrogeologic Unit
Mg/Kg	Milligrams per Kilogram
Mg/Kg-Day	Milligrams per Kilogram per Day
Mg/L	Milligrams per Liter
MSL	Mean Sea Level
ND	Not Detected
NAWQC	National Ambient Water Quality Criteria
NIH	National Institute of Health
NIOSH	National Institute of Occupational Health
NOAA	National Oceanic and Atmospheric Administration
NOAEL	No Observed Adverse Effects Level
NOEC	No Observed Effects Concentration
NRC	National Research Council
OBL	Obligate Wetland Plant
OSWER	Office of Solid Waste and Emergency Management
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyls
PCDD	Polychlorinated Dibenzo-p-Dioxin
PCDF	Polychlorinated Dibenzofuran
P-Chem Plant	Physical/Chemical Wastewater Treatment Plant
PDA	Plume Discharge Area
PEL	Probable Effects Limit
PPM	Parts per Million
PUF	Plant Uptake Factor
QA/QC	Quality Assurance/Quality Control
RI	Remedial Investigation
ROI	Receptor of Interest
SEL	Severe Effects Level
SEM	Simultaneously Extracted Metals
SHU	Shallow Hydrogeologic Unit
SMDP	Scientific Management Decision Point
SSL	Soil Screening Level
SUF	Seasonal Use Factor
SVOC	Semi-Volatile Organic Compound
TDS	Total Dissolved Solids
TEF	Toxic Equivalency Factor
TEL	Threshold Effects Limit
TEQ	Toxicity Equivalence Quotient
TOC	Total Organic Carbon
TRV	Toxicity Reference Value
UCL	Upper Confidence Limit
UPL	Upland Plant
USACOE	United States Army Corp of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

LIST OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

USGS	United States Geological Survey
VOC	Volatile Organic Compound
UDA	Upstream of Plume Discharge Area
µg/kg	Microgram per Kilogram
µg/L	Micrograms per Liter
WHO	World Health Organization
WW	Wet Weight
WWTP	Waste Water Treatment Plant

EXECUTIVE SUMMARY

A Baseline Ecological Risk Assessment (BERA) was prepared for the Sauget Area 2 Sites (Sites) located in the villages of Sauget and Cahokia, Illinois. Environmental concerns at the Sites are being investigated subject to an Administrative Order of Consent (Docket No. V-W-'01-C-622) between the Sauget Area 2 Sites Group (the Group) and the U. S. Environmental Protection Agency (USEPA) Region V, pursuant to Sections 106 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

The objective of the BERA is to evaluate the ecological risks to biological receptors living within the aquatic and terrestrial ecosystems located on or adjacent to the Sites, as a result of exposures to Site-related constituents. The BERA is a baseline evaluation of ecological risks that utilizes both historical data regarding the Sites and data that were collected as part of investigative activities within the Mississippi River and the Sites. The BERA was prepared using conservative, but realistic assumptions concerning potential exposures to ecological receptors.

This BERA was completed in accordance with an USEPA-approved *Ecological Risk Assessment Work Plan*, which was included as Section 12.0 to the *Support Sampling Plan* (SSP) (URS, 2002a) and is included in this BERA as Appendix I-A. Data used in the completion of this BERA included laboratory analytical data that described the concentrations of Contaminants of Potential Ecological Concern (COPECs) found within various abiotic and biotic matrices associated with the Sites and the Mississippi River. This version of the BERA has been revised in response to USEPA comments. The BERA was first submitted to USEPA in August 2003.

AQUATIC ECOLOGICAL RISKS IN THE MISSISSIPPI RIVER

Risks to aquatic receptors in the Mississippi River were assessed through the collection of surface water and sediment samples from locations upstream, adjacent to, and downstream of the Sites. The samples were chemically analyzed to determine the concentrations of COPECs. Bioassays were run on both surface water and sediment samples to evaluate acute and chronic toxic effects to the test species. Bioaccumulation tests were conducted to determine the body burdens of COPECs in test organisms exposed to sediments for an extended period of time.

Fish tissue body burdens identified in historic sampling activities was also evaluated. A qualitative evaluation was completed for the pallid sturgeon given the lack of toxicity data for this or other sturgeon species.

On October 3, 2002 USEPA issued a Unilateral Administrative Order (V-W-'02-C-716) for Remedial Design and Interim Remedial Action for the SA2 Groundwater Operable Unit (OU-2), which encompassed the contamination reaching the Mississippi River adjacent to Site R from groundwater transport. On September 30, 2002, USEPA selected an interim groundwater remedy for this OU consisting of a 3,500-feet long, 140-feet deep, "U"-shaped, fully-penetrating barrier wall installed between the downgradient boundary of Site R and the Mississippi River and three-partially penetrating groundwater recovery wells inside the barrier. Construction of the barrier wall system was completed and the system was fully operational by October 22, 2003.

A summary of the conclusions drawn by this BERA regarding the risks in the Mississippi River are outlined below:

Sediments – The BERA concluded that there were no adverse ecological impacts associated with the presence of COPECs in Mississippi River sediments adjacent to or downstream of the Sites.

Chemical analysis of sediments indicated that there were measurable concentrations of COPECs in the sediments of the Mississippi River adjacent to the Sites and that some measured concentrations exceeded conservative ecologically-based benchmarks. The COPECs included volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides and metals. The highest detected concentrations of organic COPECs were located along transects closest to the shore in the sampling areas located downgradient of Site Q (North), Site Q (Central), and Site R. None of the inorganic COPECs significantly exceeded sediment quality benchmarks and the pattern of distribution throughout the sampling plots adjacent to or downstream of the Sites appeared to be random.

Although there were COPECs that exceeded conservative ecologically-based benchmarks, sediment bioassays (considered to be a stronger indicator of potential toxic effects) demonstrated that there were no toxic effects in any of the sediment samples.

Surface Water - The BERA concluded that prior to the construction of the interim remedial action for groundwater there were some ecological risks associated with the presence of COPECs in Mississippi river surface water. However, these risks have been mitigated by the installation of the groundwater barrier wall.

Surface water COPECs identified in the 2002 surface water sampling (before installation of the groundwater barrier wall) which exceeded conservative ecologically-based benchmarks included p-chloroaniline, 2,4-D, and several metals. Aquatic risks in the Mississippi River were driven by p-chloroaniline, which was identified at a concentration 800 times higher than its conservative screening benchmark in the sampling area just downstream of Site R. The metals that were identified through laboratory analysis exceeded their benchmarks, but were not significantly different from background concentrations.

Surface water bioassays from 2002 indicated that acute toxicity was limited to the sampling area just downstream of Site R. The sample with the lowest survival and young production in bioassay tests corresponded to the surface water sample that had the highest concentrations (by nearly an order of magnitude) of p-chloroaniline. Chronic toxicity was also seen at other sampling locations downstream where detected concentrations of p-chloroaniline were noted.

Surface water samples collected in 2005 and 2007, after the installation of the interim remedial action for groundwater, did not have measurable concentrations of p-chloroaniline, suggesting that the source of p-chloroaniline discharge into the Mississippi River was remediated by installation of the groundwater barrier wall.

Conclusion of the Aquatic Risk Assessment - The BERA concluded that no adverse ecological impacts were identified with sediments within the Mississippi River and that aquatic risks associated with surface water have been mitigated by the groundwater barrier wall. No risks are present to the federally endangered pallid sturgeon or other fish populations. No

additional remedial action is considered necessary to protect the aquatic ecosystem in the Mississippi River.

ECOLOGICAL RISKS IN THE FLOODPLAIN

The BERA evaluated the potential for COPECs to impact Receptors of Interest (ROIs) in the floodplain of the Mississippi River. The floodplain risk assessment addressed both the terrestrial habitats within the Sites and the ephemeral ponds located in Site Q. Risks were evaluated on a site-by-site basis using wildlife species with small home ranges (the prairie vole and short-tailed shrew) and on a whole study area basis using wildlife species with large home ranges (the osprey, mink and the red fox). Risks to these ROIs were calculated based on food chain models using concentrations of COPECs that were identified in surface water, soil, plant tissues, and invertebrate body burdens as input parameters. Surface soil sampling that was used to support this BERA was biased toward areas of highest known contamination, and therefore this BERA represents the worst-case conditions.

Piscivores – The consumption of fish and surface water by the mink (surrogate receptor for piscivorous mammals) and osprey (surrogate receptor for piscivorous birds) were defined as potential sources of risk to the fish eating ROIs.

From a habitat standpoint, the riverbank adjacent to the Sauget Area 2 Sites is not suitable for any fish-eating mammal because nearly the entire 14,000 linear feet of riverbank is composed of stone riprap, piers, pilings, buildings and paved areas with almost no vegetative cover. Therefore, it is unlikely that any piscivorous mammals would have significant exposure to COPECs related to the Area 2 Sites.

Most of the estimated ecological risks for the mink were based on consumption of fish from the larger of the two ephemeral ponds in the southern end of Site Q. Fish that had been washed into the pond by overbank flooding of the Mississippi River were collected prior to its evaporation, and analyzed for the presence of COPECs. If those fish are removed from the modeling, as the community no longer exists, then the only COPECs identified for the mink is 2-(4-Chloro-2-methylphenoxy)propanoic acid (MCPP). The risks associated with these COPECs

were slight as they were not significantly above No Observed Adverse Effects Level (NOAEL) Toxicity Reference Values (TRVs) or background values.

After installation of the groundwater barrier wall, no COPECs were identified that exceeded benchmark values and background levels posing risks to the osprey

Plants - The potential for direct impact to plants was evaluated by comparing surface soil concentrations to plant screening benchmarks. A variety of COPECs in each Site exceeded the benchmarks. These benchmarks are considered to be highly conservative even by the authors of the benchmarks and no indication of impacts to plants was noted in field observations.

Herbivores - No significant risks were identified for the prairie vole (surrogate receptor for herbivorous mammals) at Sites P, R, S, or Q (South). Risks were present at Site O, where dioxins/furans significantly exceeded both the NOAEL and the LOAEL benchmark values and background concentrations. Potential areas of ecological risks at Site O for the vole are based on soil concentrations centered on sampling locations W-O-1, located in area O (North), and W-O-3 (Figures ES-1 and ES-2).

Carnivores – The potential for adverse ecological risks to upper-trophic level receptors was estimated using the red fox as a surrogate receptor for carnivorous mammals. The potential for adverse impacts was based on modeled exposure to prey items (the short-tailed shrew and the prairie vole). Based on the food chain modeling, the BERA identified that there is some potential for adverse ecological risks to the red fox based on the assumption that the carnivore would feed on short-tailed shrews and prairie voles in Site O and Site Q. In the food chain modeling, dioxins/furans and mercury exceeded their NOAEL and LOAEL benchmarks, indicating a potential for an ecological risk. However, mercury was not significantly above background concentrations. Potential areas of ecological risks for the red fox based on calculated concentrations of dioxins/furans in prey items centered on sampling locations W-O-1, located in Site O (North), W-O-3, and W-Q-11 in Site Q. These areas are shown on Figures ES-1 through ES-3.

Ponds – The primary risk to fish in the Site Q ponds is the periodic drying of the ponds. The ponds are ephemeral, and have no permanent reproducing fish population. Fish only occur in

the ponds when the Mississippi River reaches a sufficient stage to inundate the ponds and deposit fish. When the river recedes, the ponds dry up and any remaining fish die.

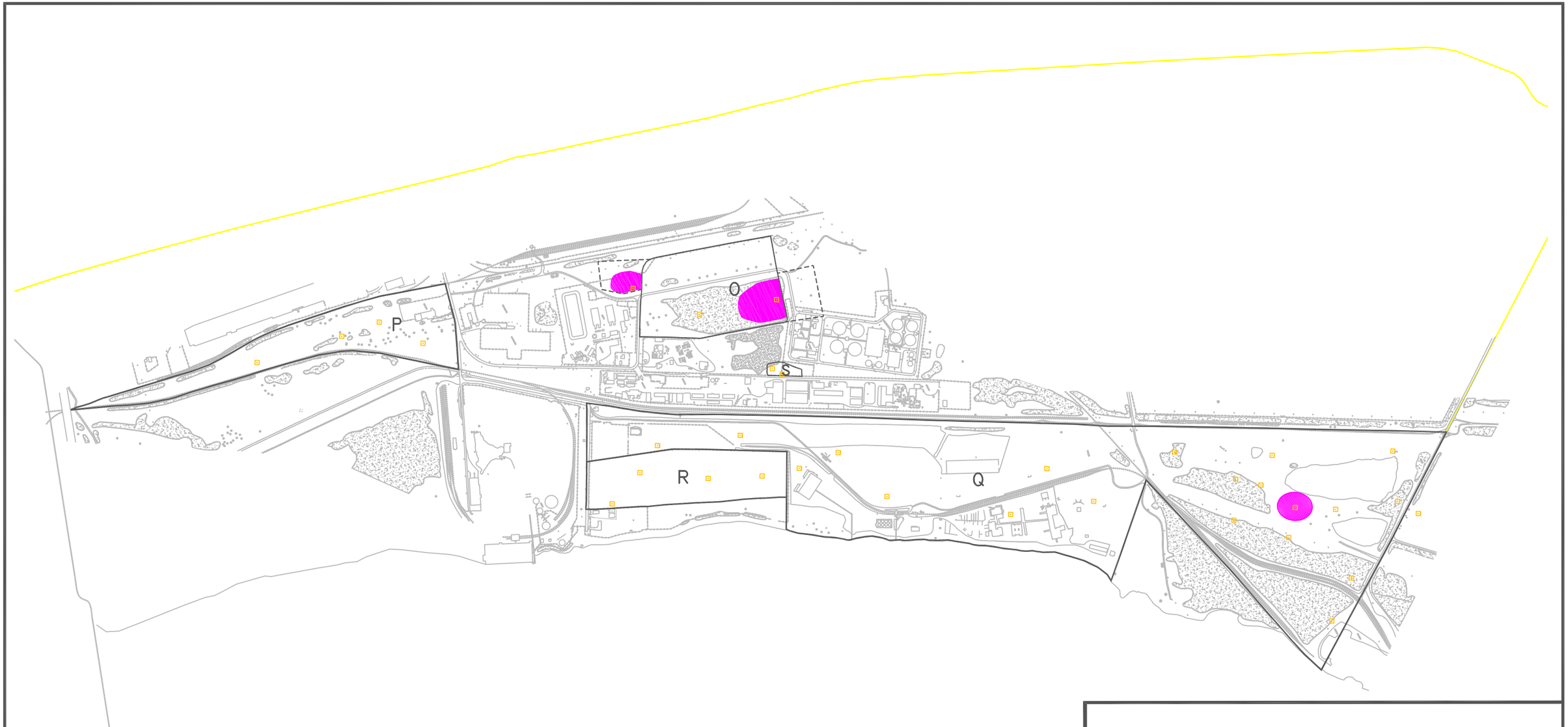
The BERA evaluated ecological risks to aquatic receptors through analysis of surface water and sediment. Screening COPEC concentrations against conservative benchmarks indicated some potential for risks to aquatic receptors during the brief periods that these ponds contain water. Given the magnitude of the exceedances of the conservative benchmarks and the ephemeral condition of the ponds, it is concluded that no significant aquatic risks associated with the COPEC are present in the ponds.

Conclusion of the Floodplain Risk Assessment - The BERA concluded that ecological risks to herbivores and carnivores from exposure to dioxins/furans are present at Site O and Site Q.

CONCLUSIONS OF THE BERA

The BERA concluded that no risks were associated with sediments or surface water from the Mississippi River.

The BERA identified risks associated with COPECs in surface soil found throughout the Sauget Area 2 Sites. Sites O (vole and fox) and Q (fox only) were considered to pose risks to mammals from exposure to dioxins/furans in the floodplain. These areas will be evaluated further in the Feasibility Study for the identification of remedial actions.



LEGEND

- Waste Characterization Boring Location
- Areas of Potential Ecological Concern

0 1000

SCALE FEET

SAUGET AREA 2
SAUGET ILLINOIS

Figure ES – 1

Areas of Potential Ecological Concern
Sauget Area 2 Sites

Date:	Project Number:	Scale:
January 2008	1–7305–0000	AS SHOWN
Source: URS	**Checked by:**	**Sheet Number:**

amec EARTH & ENVIRONMENTAL, INC.
285 Davidson Avenue, Suite 405
Somerset, NJ 08873

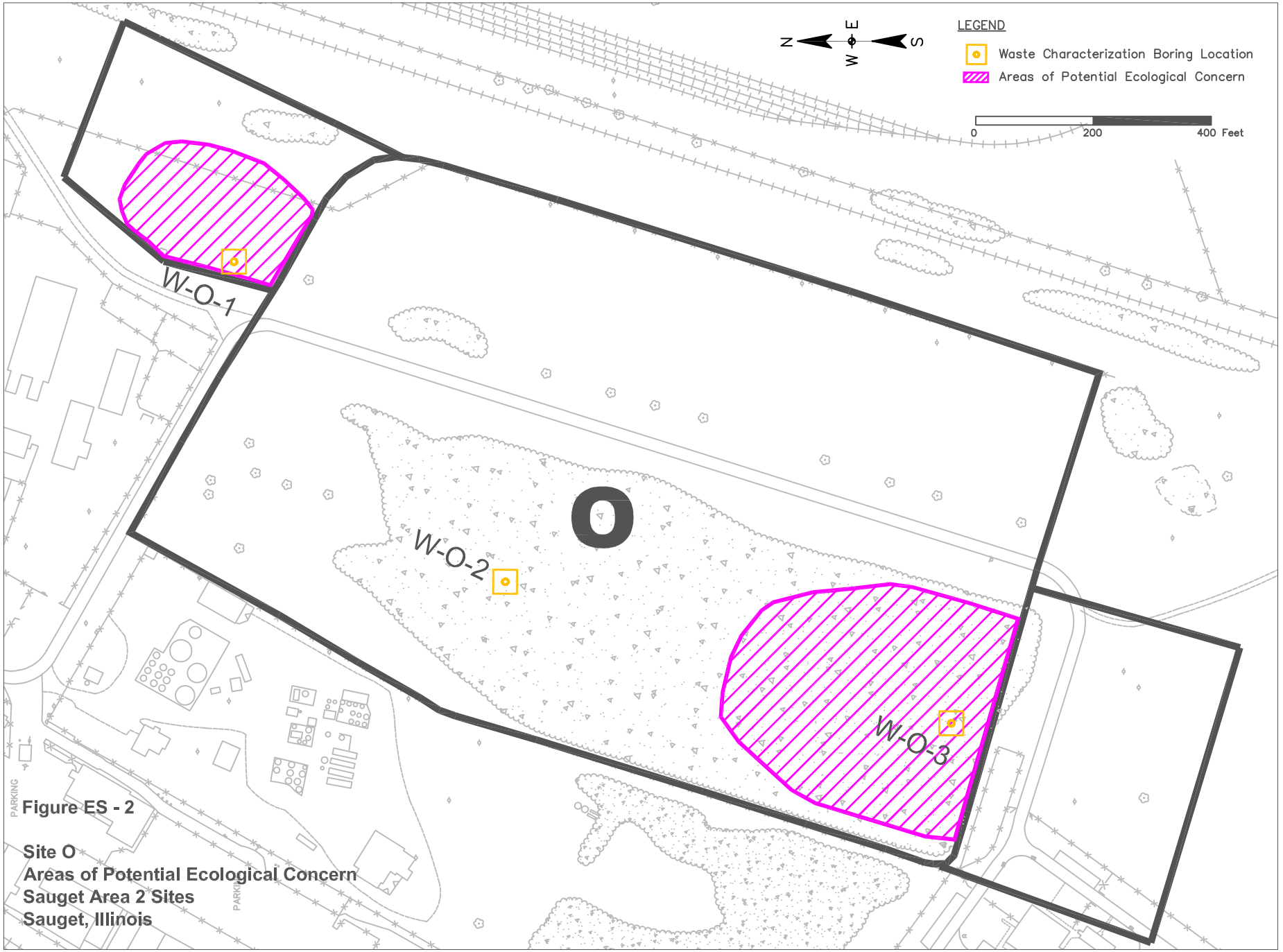


Figure ES - 2

Site O
Areas of Potential Ecological Concern
Sauget Area 2 Sites
Sauget, Illinois

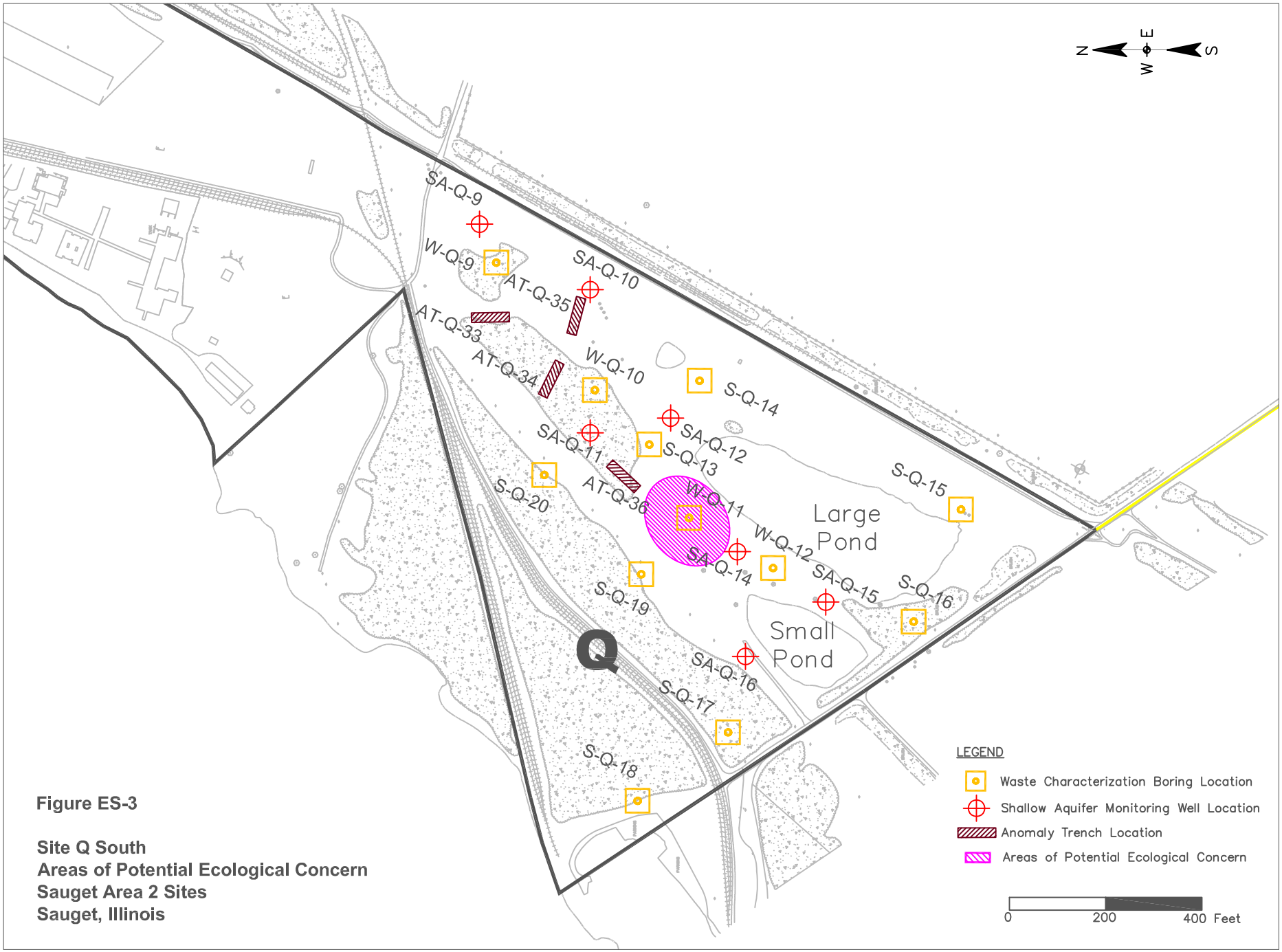


Figure ES-3

Site Q South
Areas of Potential Ecological Concern
Sauget Area 2 Sites
Sauget, Illinois

1.0 INTRODUCTION

Environmental concerns at the Sauget Area 2 Sites (the Sites) are being investigated subject to an Administrative Order of Consent (AOC) (Docket Number V-W-01-C-622) between the Sauget Area 2 Sites Group (the Group) and the U. S. Environmental Protection Agency (USEPA) Region V, pursuant to Section 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

1.1 HISTORY

The AOC required a Remedial Investigation/Feasibility Study (RI/FS) at the Sites. The RI activities were conducted between June 2002 and June 2003 and the Group submitted a draft RI/FS report in January, 2004. In August 2004, the USEPA provided significant comments on the RI/FS which required the Group to perform additional investigation of the Sites and to submit a revised RI/FS.

The Group submitted a Technical Memorandum in April, 2005, detailing the scope of work for the additional investigations. Supplemental field investigations were conducted in 2005 and 2006 to fill identified data gaps in the RI/FS and a regional fate and transport model was developed in 2007. A revised RI, including the results of the supplemental investigations and the ground water model, was submitted in February 2008.

A Baseline Ecological Risk Assessment (BERA) was submitted to the USEPA in August 2003 as part of the original RI/FS work for the Sites. This BERA has been revised to address comments provide by the USEPA and CH2MHill on the previous version of the BERA and to incorporate the results of the supplemental field investigations. The USEPA provided comments on the previous BERA to the Group in a correspondence dated October 16, 2003. On November 18, 2003, a meeting was held between the Group, the USEPA, the Illinois Environmental Protection Agency (IEPA), and CH2MHill in St. Louis to discuss the comments on the BERA. Following that meeting, it was agreed that the USEPA and the IEPA would be provided with a document presenting the actual language changes and modifications to the BERA for review prior to their incorporation into the BERA. That language was submitted to the USEPA on April 15, 2004 and is included in this version of the BERA.

A protocol which outlined how the BERA would be finalized to incorporate the results of the supplemental investigations was provided to the USEPA in December 2006. After exchanges of correspondence between the Group and the USEPA and a meeting on April 19, 2007, the USEPA approved the protocols in a correspondence dated January 8, 2008. This revised BERA was prepared in accordance with the approved protocols.

During the sampling for the RI, the USEPA issued a Unilateral Administrative Order (V-W-'02-C-716) for the Remedial Design/Remedial Action (RD/RA) of an interim groundwater remedy to mitigate the release of contaminated groundwater to the Mississippi River. This order was issued on October 3, 2002 and was referred to as Operable Unit 2 (OU-2) for the Sites. In response to this Order, Solutia submitted a RD/RA Work Plan, a Pre-Final Design and a Final Design for the interim remedy. The USEPA issued conditional approval of the interim groundwater remedy on May 15, 2003.

The approved interim remedy consisting of a 3,500-foot long, 140-foot deep, "U"-shaped, fully-penetrating barrier wall was installed between the downgradient boundary of Site R and the Mississippi River and three-partially penetrating groundwater recovery wells were installed inside the barrier.

Construction of the extraction wells, discharge piping and control system was initiated in June of 2003, and the groundwater extraction system was started on July 15, 2003. The USEPA approved the final design for the interim groundwater remedy on October 16, 2003.

1.2 SAUGET AREA 2 SITES

The Sites include five terrestrial source areas (Sites O, P, Q, R, and S), two of which have been divided to include smaller subsections. Site O has been subdivided to include Site O, Site O (North), and Site O (South). Site Q has been subdivided into Q (North), Q (Central), Q (South), and Q (Ponds). Since Q (North) and Q (Central) are disturbed (covered with pavement, roads, parking areas, debris and buildings) and contain no viable wildlife habitat, the USEPA agreed that this BERA would only assess Q (South), and Q (Ponds). Since the Sites front approximately 14,000 linear feet of the Mississippi River, the BERA also includes an assessment of the potential risks to aquatic receptors in the Mississippi River. Data from seven

sampling areas in the Mississippi River, or plots, one upstream of the Sites (labeled R1) and six adjoining the Sites (labeled R2, PDA, R3, R4, R5, and R6) were evaluated for indications of adverse ecological impacts. Data was not collected from the location where the water is discharged from the Sauget wastewater treatment system, referred to as the plume discharge area (PDA) as part of the RI sampling conducted in 2003, but surface water and sediment data were collected from the PDA as part of the 2005 and 2007 Groundwater Migration Control System Performance Verification. The PDA sample locations were originally defined by Menzie-Cura & Associates, Inc. as part of their 2000 sampling effort in support of the W.G. Krummrich facility ecological risk assessment (Menzie-Cura, 2001).

1.3 PURPOSE AND OBJECTIVES

The objective of this BERA is to evaluate the potential for adverse ecological effects resulting from exposure to constituents related to the Sites and up gradient groundwater sources in the aquatic and terrestrial ecosystems located on, or adjacent to the Sites. The BERA utilized both historic data regarding the Sites and data that were collected as part of investigative activities through March 2007. This BERA was prepared using conservative, but realistic, assumptions about potential exposures.

The principal functions of this BERA are to:

- Determine whether ecological risks currently exist at the Sites;
- Identify those constituents present at the Sites that pose ecological risks; and
- Generate data and information for risk management and risk reduction decisions.

1.4 ORGANIZATION OF THIS REVISED BERA

This BERA was completed in accordance with a USEPA-approved *Ecological Risk Assessment Work Plan* (Appendix I-A) and follows the *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments* (USEPA, 1997a). Data used in this BERA include analytical data on the concentrations of compounds of potential ecological concern (COPECs) from various biotic and abiotic matrices associated with the Sites and the Mississippi River collected during several field studies.

Field data collected in support of the original RI/FS investigation were collected in accordance with the *Site Sampling Plan* (SSP). The data included:

- Qualitative biological surveys of flora and fauna on the Sites, including a photograph log of various habitats found throughout the Sites (Appendix IB);
- Surface water and sediment samples collected for chemical and biological analyses from the Mississippi River and ponds located in the southern end of Site Q;
- Sediment samples collected for bioaccumulation studies from the Mississippi River and ponds located in the southern end of Site Q;
- Fish tissue collected from the ponds located in the southern end of Site Q;
- Surface soil samples collected from all five Sites;
- Plant tissue samples collocated with the surface soil samples;
- Terrestrial invertebrate tissue samples collected from the five Sites; and
- Surface soil samples from the five Sites, collected for use in earthworm bioaccumulation studies.

Historic data utilized in this BERA include fish tissue body burden data developed as part of the *Sauget Area 1 Ecological Risk Assessment* (Menzie-Cura, 2001). Further information regarding the collection of field data can be found in *Floodplain Field Sampling Report* (AMEC, 2003a) and *Aquatic Field Sampling Report* (AMEC, 2003b).

This Revised BERA also utilized chemical data developed from supplemental surface water and sediment samples collected by URS from the Mississippi River in September of 2005 and March of 2007. Additionally, supplemental surface soil sampling data collected by URS in October 2002, and May 2005 were also incorporated into this Revised BERA.

The Problem Formulation phase (Section 2.0) characterizes the environmental setting of the Sites, develops the conceptual site model (CSM), and describes the assessment endpoints to be evaluated in the BERA. The CSM identifies potential site-related contaminants and describes contaminant fate and transport mechanisms, mechanisms of toxicity, and complete exposure pathways. Section 3.0 and Section 4.0 discuss the COPECs that have been identified in the aquatic environment of the Mississippi River and the terrestrial and aquatic environment of the floodplain that contains the Sauget Area 2 Sites. The effects assessment (Section 5.0

and Section 6.0) characterizes the relationship between chemicals identified during the investigative sampling and various attributes associated with ecological receptors. The ecological effects evaluation identifies those exposure levels that represent conservative thresholds for adverse ecological effects.

During the Risk Characterization phase (Section 7.0), the information concerning exposure and the information concerning potential effects of exposure are integrated to estimate risks (the likelihood of effects given the exposure) or potential impacts. Uncertainties noted in the development of the aquatic and floodplain ecological risk estimates are detailed in Section 8.0. Section 9.0 presents the conclusions of this BERA.

2.0 PROBLEM FORMULATION

The problem formulation section consists of the description of the relevant features and current condition of the environment, the description of the potential sources for Site-related COPECs, the identification of ecological receptors at the Site and surrounding area and the development of the CSM.

2.1 SAUGET AREA 2 SETTING

Sauget Area 2 is situated near the villages of Sauget and Cahokia, Illinois. The boundaries of Sauget Area 2 are generally located along 14,000 feet of the eastern bank of the Mississippi River, south of the MacArthur bridge railroad tracks, west of Illinois State Highway 3, and north of Cargill Road (Figure 2.1).

The Sites include five terrestrial source areas (Sites O, P, Q, R, and S) which are located adjacent to the Mississippi River. Two of these areas (Sites O and Q) have been divided to include smaller subsections. Site O has been subdivided to include Site O, Site O (North), and Site O (South). Site Q has been subdivided into Q (North), Q (Central), Q (South), and Q (Ponds). Site Q and Site R are located on the west side of the floodwall and levee that is operated and maintained by the US Army Corps of Engineers (USACOE) and the Metro East Sanitary District. The floodwall is designed to protect the City of East St. Louis and the Villages of Sauget and Cahokia from flooding. The other Sites (O, P, and S) are located on the dry side of the floodwall and levee.

The Sauget Area 2 Sites have been significantly impacted by anthropogenic activities (industrial activities; construction of buildings, roads and railroad lines). The exceptions are Q (South) and Q (Ponds), which are vegetated.

2.2 ECOLOGICAL SETTING

Sauget Area 2 consists primarily of flat bottomland in the floodplain of the Mississippi River, in an area known as American Bottoms. Generally, the land slopes from north to south and from east to west, towards the Mississippi River. Land surface elevation ranges from 400 to 410 feet

above Mean Sea Level (MSL) with little topographic relief. The following sections summarize the ecological setting for individual areas of concern evaluated in this BERA.

2.2.1 MISSISSIPPI RIVER

Sauget Area 2 is approximately two miles downstream of the confluence with the Missouri River. The section of the Mississippi River adjacent to the Sites is called the Unimpounded Reach (USGS, 1999), which extends from St. Louis downstream to Cairo, Illinois. It is also called the Open River Reach, characterized by channelized aquatic habitats with levees to provide flood protection. A rock revetment covers approximately 2,250 feet of the riverbank adjacent to Site R, and the remainder of the riverbank adjacent to the Sites has been developed to support barge and shipping traffic. The center of the channel is maintained at a minimum depth of nine feet to allow for barge traffic. The current is swift, with median flows ranging from 85,000 to 95,000 cubic feet (ft^3) per second (USGS, 1999).

There is a significant drop in surface water and sediment quality in the Mississippi River downstream of its confluence with the Missouri River (USGS, 1999). The changes have two major causes; sediment from the Missouri River and contaminants from the city of St. Louis.

The Missouri River drains an area with highly erodible soils and is the major source of sediments to this segment of the Mississippi River (USGS, 1999). This contribution of sediment leads to changes in water clarity, sedimentation of shallow areas, and the introduction of non-site-related, sediment-borne contaminants.

Sewage and industrial discharges from St. Louis have historically had a significant effect on river water quality in this segment of the river. The Missouri Department of Natural Resources (1994) estimated that 300 tons of ground garbage was discharged to the river daily in 1957. As late as 1970, raw sewage was discharged directly into the river by the City of St. Louis (Corbett, 1997). Significant amounts of metals and organic compounds (e.g., polychlorinated biphenyls [PCB]) are discharged to the river through municipal and industrial wastewater and urban runoff (Boyer, 1984). The Missouri River has been reported to contribute up to 50 percent (%) of the pesticide load in the Mississippi, even though it only contributes 22% of the flow (Goolsby and Pereira, 1995).

Surface water quality in the Mississippi River has improved since the passage of the Federal Water Pollution Control Act in 1970, though concentrations of pesticides still exceed USEPA guidelines during low flow, high use periods of the year (USGS, 1999).

Observations made during the 2002 field survey showed the river depth adjacent to Sauget Area 2 to be variable; ranging as deep as 35 feet, with an average depth of 16.5 feet. Because of the fast currents, the water column was well mixed, as indicated by uniform temperature, conductivity, and dissolved oxygen measurements. The surface water pH was slightly alkaline, ranging from 7.2 to 8.3 near the bottom, and from 8.0 to 8.6 from mid-depth to the surface. Dissolved oxygen levels were at or near saturation throughout the water column. The sediments exhibited a range of grain sizes, from very fine silty-clay to very coarse gravelly-sand with pebbles (Appendix II-A). The color and organic carbon content also appeared to be highly variable.

Aquatic life depends upon the availability of suitable habitat. Areas of deep, swift water, such as found adjacent to Sauget Area 2, would be occupied by channel-dwelling fish and would not support spawning or nursery functions. The Upper Mississippi River Basin supports at least 260 freshwater fish species (Fremling *et al, 1989*). Riverine species either occupy the water column (e.g., white bass, *Morone chrysops*), or live on the bottom (e.g., channel catfish, *Ictalurus punctatus*) (USGS, 1999). The federally-endangered pallid sturgeon (*Scaphirhynchus albus*) is endemic to the middle/lower Mississippi River (USACOE, 2005); however, has not been observed in the vicinity of Sauget Area 2. Other common riverine species identified by USGS (1999), based on Long-Term Resource Monitoring Program (LTRMP) catch data include sauger (*Stizostedion canadense*), walleye (*Stizostedion vitreum*), and smallmouth buffalo (*Ictiobus bubalus*). Important prey species indigenous to the Unimpounded Reach area include gizzard shad (*Dorosoma cepedianum*) and emerald shiners (*Notropis atherinoides*).

Detailed observations made of the Mississippi River in the vicinity of the Sites can be found in Menzie-Cura (2001) and in the *Aquatic Field Sampling Report* (AMEC, 2003b).

2.2.2 SITE P ECOLOGICAL CONDITIONS

Site P is the northernmost of the five Sites, occupying approximately 20 acres between the Illinois Central Gulf Railroad and the Terminal Railroad, north of Monsanto Avenue in the village of Sauget. Figure 2-2 shows the layout of Site P.

Site P was operated by Sauget and Company as an Illinois Environmental Protection Agency (IEPA)-permitted landfill from 1973 to approximately 1980, accepting general wastes, including diatomaceous earth filter cake from Edwin Cooper (now Ethyl Corporation) and non-chemical wastes from Pharmacia. IEPA inspections documented the presence of drums labeled "Monsanto ACL-85, Chlorine Composition", drums of phosphorus pentasulfide from Pharmacia, and Pharmacia ACL filter residues and packaging. The available document did not state whether the drums were empty or full. Site P is currently inactive and covered, however, access to the site is not restricted.

Approximately half of Site P is flat, level ground. The other half is split between two gullies, one located in the south-center section of the disposal area and the other along the eastern border. The flat areas were dominated by herbaceous vegetation such as Johnson grass (*Sorghum halepense*), white heath aster (*Aster pilosus*), partridge pea (*Cassia fasciculata*), common mullein (*Verbascum thapsus*), and crown vetch (*Coronilla varia*). Early successional hardwood species such as eastern cottonwood (*Populus deltoides*) and smooth sumac (*Rhus glabra*) can also be found across the flat area. More extensive stands of hardwood trees, including eastern cottonwood, white ash (*Fraxinus americana*), American elm (*Ulmus americana*), box elder (*Acer negundo*), and black locust (*Robinia pseudoacacia*) can be found along the sides and across the bottom of the defiles.

Vegetation in Site P appears robust, with no obvious phytotoxicological effects such as chlorosis, wilting, or mortality. Near surface soil sampling point W-P-1 (Figure 2-2), there appeared to be fewer plants, but individual plant growth was vigorous. Photographs of Site P can be seen in Appendix I-B and in the *Floodplain Field Sampling Plan* (AMEC, 2003a).

2.2.3 SITE R ECOLOGICAL CONDITIONS

Site R is a closed industrial-waste disposal area owned by Solutia Inc., and is located between the flood control levee and the Mississippi River in Sauget, Illinois (USEPA, 2002c). Site R is bordered by Riverside Avenue on the north and Site Q on the east and south. The landfill has been known over time as the "Sauget Toxic Dump," "Monsanto Landfill," and the "River's Edge Landfill" (USEPA, 2000c). The former landfill occupies approximately 22 acres of the 36-acre site (USEPA, September 2002).

Access to Site R is restricted by a perimeter fence surrounding the site and is monitored by Solutia plant personnel (URS, 2002a). Additionally, warning signs are posted on the fence surrounding the site.

In 1979, Pharmacia completed the installation of a clay cover on Site R to cover waste, limit infiltration through the landfill, and prevent direct contact with fill material. The cover's thickness ranges from two feet to approximately eight feet. In 1985, Pharmacia installed a 2,250-foot long rock revetment along the east bank of the Mississippi River adjacent to Site R. The purpose of the stabilization project was to prevent further erosion of the riverbank and thereby minimize potential for the surficial release of waste material from the landfill. During the 1993 flood, Site R was flooded but the clay cap was not overtopped. No erosion of the riverbank or cap resulted from this flood.

This disposal area is flat (Figure 2-3), with a thick, vigorous vegetative community comprised of various herbaceous species. However, since the cap is maintained by periodic mowing, it is unlikely that this disposal area supports a significant population of wildlife.

2.2.4 SITE O ECOLOGICAL CONDITIONS

Located on Mobile Avenue in Sauget, Illinois, Site O occupies approximately 20 acres of land to the northeast of the American Bottoms Regional Wastewater Treatment Facility (ABRTF) and south of the Sauget Physical/Chemical Wastewater Treatment Plant (P-Chem Plant). An access road to the ABRTF runs through the middle of the site. During the development and review of the RI/FS Support Sampling Plan and Addenda (URS, 2002a; URS, 2002b) the area

of Site O was expanded to include two adjacent areas, known as O North and O South, following the review of historical aerial photographs.

Formerly, the P-Chem Plant was the location of the Sauget Wastewater Treatment Plant (WWTP). The Sauget WWTP began operation in approximately 1966 and treated waste from area industries and residents. The facility has undergone significant upgrades over time and in the 1980s, after the newly constructed ABRTF came on-line, the Sauget WWTP became known as the P-Chem Plant and serves currently as a pre-treatment facility for ABRTF.

Site O consists primarily of four sludge dewatering lagoons (sludge drying beds) which received clarified industrial and municipal wastes from the Sauget WWTP. The lagoons operated from approximately July 1966 to 1978, during which time period approximately 10 million gallons per day of wastewater was treated of which more than 95 percent was from area industries. Initially, the sludge in the lagoons was not treated, but at some point during the lagoons' use, lime was added to the sludge for neutralization (Ecology & Environment, 1988). The lagoons were not lined and were excavated into the Henry Formation Sand (Ecology & Environment, 1998). Currently, the lagoons are covered with low permeable soil at least two feet in thickness and are vegetated with grass, brush, bushes, and small trees. (AMEC, 2003c).

As the disposal sites are covered with early successional herbaceous species and hardwood species that are relatively young in growth, it appears that these areas have been historically disturbed. Most of Site O (North) is covered by herbaceous species such as Canada goldenrod (*Solidago canadensis*), Johnson grass, crown vetch, and white heath aster. Tartarian honeysuckle (*Lonicera tartarica*), stiff dogwood (*Cornus foemina*), and smooth sumac dominate the tall shrub/scrub community that covers most of Site O. Some larger hardwood species, including eastern cottonwood and slippery elm (*Ulmus rubra*) can be found in Site O (North) and Site O (South). The vegetative community throughout Site O is robust, with good vigor and no indication of obvious phytotoxicological effects such as chlorosis, wilting, or mortality. Photographs of Site O can be seen in the Floodplain Field Sampling Plan (AMEC, 2003a).

2.2.5 SITE S ECOLOGICAL CONDITIONS

Site S is a small, rectangular disposal area west-southwest of Site O measuring less than 1 acre in size (Figure 2-5). The Site is divided roughly in half with the southern end entirely paved or covered with gravel, and the northern end vegetated.

Site S is partially located on ABRTF (Village of Sauget) property and partially on the former Clayton Chemical Company property, and is situated to the west-southwest of Site O. The site is a small disposal area of less than five acres in size. The northern portion of the site is grassed and its southern portion is covered with gravel and is fenced.

In the mid-1960s, solvent recovery began on the Clayton Chemical property. Waste solvents were steam-stripped resulting in water laden still bottoms that were allegedly disposed of in a shallow excavation that is now designated as Site S (USEPA, 2002c). Historic aerial photographs indicate that Site S may have been a potential drum disposal area (IEPA, 1997a).

Between approximately 1976 and 1979, cinders and fly ash were utilized to stabilize and cover the pits, and breaching of the Site S pit occurred during this work (IEPA, 1997b). Some of the pit # 3 (Site S) materials may have been spread on the area to the north where the first two pits were located. The pits may also have been covered with sand and rock, followed by a top cover and seeding (IEPA, 1997b).

The vegetative community in the northern portion of Site S is divided between two distinct community types; an herbaceous community dominated almost exclusively by Johnson grass, and a hardwood forest community containing black locust, eastern cottonwood, American elm, and white mulberry (*Morus alba*). The vegetation appears robust, with no obvious phytotoxicological effects such as chlorosis, wilting, or mortality.

2.2.6 SITE Q ECOLOGICAL CONDITIONS

Site Q is located in the Villages of Sauget and Cahokia, Illinois, and is bordered by Sauget Site R and the old Union Electric Power Plant to the north, the Illinois Central Gulf Railroad and the United States Army Corps of Engineers (USACOE) flood control levee to the east, and the

Mississippi River to the west. Site Q is an aggregation of several locations where various waste disposal activities occurred. Also included within the boundaries which EPA has designated for Site Q are several areas with no known history of waste disposal activities. Locations within Site Q where waste disposal activities occurred include:

The old Milam/Cahokia Landfill;
The Sauget Municipal Landfill;
Some areas of random, unpermitted dumping; and
The Union Electric fly ash impoundments.

Due to its large size and varied disposal history, Site Q was divided into sections based on the nature and extent of contamination and the anticipated remedial actions that would be recommended at the site. The subdivision was initially discussed during the FS process (URS, 2004) and modified during meetings among USEPA, IEPA, and the SA2SG, resulting in the following sub-areas of Site Q:

- Site Q Dogleg – The northern portion of Site Q North due east of Site R, bounded on the north and south by extensions of the Site R north and south boundaries.
- Site Q North – The northern portion of Site Q minus Site Q Dogleg. Q North and Q Dogleg together occupy approximately 40 acres.
- Site Q Central – The central portion of Site Q, approximately 25 acres.
- Site Q South – The portion of Site Q south of the Alton & Southern railroad, approximately 25 acres.

During the 1990s, at least, a small pond was located in the southeast corner of Site Q Central, just north of the Alton & Southern railroad (Ecology & Environment, 1997). Two larger ephemeral ponds are located in Site Q South, which are affected by periodic flooding.

Most of Site Q is covered with highly permeable black cinders. A barge loading facility currently operates in the southern portion of Site Q that is also used for construction debris disposal. The northern portion of Site Q is currently used as a bulk storage terminal for lawn and garden products. Access to some portions of the site is restricted by fencing and gates. Other parts of the site have unrestricted access.

Site Q is on the wet side of the USACOE floodwall. In 1993, during the highest recorded flood in St. Louis's history, Site Q was flooded. USEPA conducted a CERCLA removal action at Site Q in 1995. This removal action involved the excavation of PCBs, organics, metals, and dioxin-contaminated soils and drums, which had been scoured out of the fill area. USEPA conducted a second CERCLA removal action at Site Q beginning in October of 1999 and into early 2000. During this removal action, USEPA excavated over 3,271 drums and over 17,000 tons of contaminated soils containing metals, PCBs, and organics. Excavated material was transported by rail to Oklahoma for disposal at SafetyKleen's Lone Elk hazardous waste landfill.

Site Q has been subdivided into Q (North), Q (Central), Q (South), and Q (Ponds) for this BERA. Since Q (North) and Q (Central) are covered with pavement, roads, parking areas, debris and buildings, and contain no viable habitat for wildlife, the USEPA agreed that this BERA would focus the assessment on Site Q (South), and Site Q (Ponds).

2.2.6.1 Site Q (South)

Site Q (South) has a significant quantity of river floodplain forest typical to this section of the Mississippi River (see Figure 2-6). The four major floodplain forest communities in the Upper Mississippi River System include those dominated by black willow (*Salix nigra*), eastern cottonwood, silver maple (*Acer saccharinum*), or a mixed oak-hickory forest (USGS, 1999).

Approximately 50% of Q (South) is covered with a mature secondary hardwood forest, with the remainder covered by herbaceous plants. Plant species identified by the USEPA in their survey were cocklebur (*Xanthium strumarium*), common mullein, common evening primrose (*Oenothera biennis*), black-eyed susan (*Rudbeckia serotina*) and eastern cottonwood. Identified mammals included eastern cottontail (*Sylvilagus floridanus*) and white-tailed deer (*Odocoileus virginianus*). Identified birds included red-winged blackbirds (*Agelaius phoeniceus*), American robin (*Turdus migratorius*), northern cardinal (*Cardinalis cardinalis*), field sparrow (*Spizella pusilla*), domesticated pigeons (*Columba livia*), American coot (*Fulica americana*), common flicker (*Colaptes auratus*), American kestrel (*Falco sparverius*), and wild turkey (*Meleagris gallopavo*).

Observations made during the October 2002 field event in support of the preparation of this BERA indicated that Site Q (South) supports a more diverse vegetative community than any of the other Sauget Area 2 Sites. The central portion of the Site is dominated by a mixed grass and forb community containing Canada goldenrod, white heath aster, Johnson grass, orchard grass (*Dactylis glomerata*), and bushy bluestem (*Andropogon gerardi*) (see Figure 2-6). Other areas are dominated by common clotbur (*Xanthium chinense*).

The forested portion of Site Q (South) is also diverse. The forested area surrounding sample location S-Q-16 is dominated by black willow and eastern cottonwood, and contains almost no understory or herbaceous strata. The forest adjacent to W-Q-10, S-Q-13, SA-Q-11, AT-Q-33, AT-Q-34, and AT-Q-36 is dominated by white mulberry, with a few isolated eastern cottonwoods and no understory or herbaceous strata. The forested community in the vicinity of S-Q-19 and S-Q-20 was dominated by black willow, with an occasional eastern cottonwood. The herbaceous stratum in this area was dominated by common clotbur, with other herbaceous species including jumpseed (*Polygonum virginianum*) and wild cucumber (*Echinocystis lobata*). The forested community in the vicinity of SA-Q-16 and S-Q-17 was dominated by silver maple, with an herbaceous stratum in open clearings of tall nettle (*Urtica procera*). S-Q-18 was located in a white mulberry grove.

Photographs of Site Q can be can be seen Appendix I-B and in the *Floodplain Field Sampling Plan* (AMEC, 2003a) and the *Aquatic Field Sampling Report* (AMEC, 2003b).

2.2.6.2 Site Q (Ponds)

The ponds are ephemeral bodies of water that are subject to cycles of filling and drying, dependent upon rainfall and the flood stage of the Mississippi River. The large pond covers approximately 8.6 acres and the small pond covers approximately 2.6 acres. Both ponds were dry in January 2001, then refilled following flooding of the Mississippi River in March 2002. By August 2002, the small pond was again dry and the large pond dried in December 2002. Both ponds were refilled by stormwater in June 2003.

When the ponds are full, they can provide some habitat for amphibians and fish (when washed in by floods), and they can provide a water source for wildlife. When the ponds are dry, the land surface that was flooded is covered with herbaceous vegetation.

In November 2002, the large pond was nearly dry, with the water, occupying an estimated 50-foot by 100-foot area. The water column was only 2 to 6 inches deep and was very turbid. The sediments were sticky clay with silt and contained some organic matter. An herbaceous community dominated by hydrophytic plants typical of wetland communities surrounded the pond. Species in this area included umbrella sedge (*Cyperus strigosus*), box sedge (*Carex lurida*), lady's thumb (*Polygonum persicaria*), and water pepper (*Polygonum hydropiper*).

General observations of the large pond, including the types of fish captured during the November 2002 aquatic sampling to support this BERA can be found in Aquatic Field Sampling Report (AMEC, 2003b).

In the spring of 2003, sufficient stormwater fell that both of the ponds were temporarily filled. In June 2003, sediment and surface water were collected from the ponds for this BERA, though no fish were present. Field sampling procedures were reported in the *Draft Baseline Ecological Risk Assessment Addendum, Sauget 2 Area Sites* (AMEC, 2004).

2.2.7 SENSITIVE RECEPTORS

Sensitive receptors include those natural habitats that could support threatened and/or endangered (either federally or state listed) or could support wetlands, or the endangered and/or threatened species themselves. Habitat to support threatened and/or endangered species has not been observed at the Sites, which is supported by the lack of threatened and/or endangered expected on the Sites (USEPA, 1997b). Menzie-Cura (1999) noted that a pair of bald eagles attempted to nest on the southern end of Arsenal Island, south of the Sites, in 1993. While the pair failed in their first attempt, it is not know whether later attempts were successful. A nest was observed by Menzie-Cura in 1996, but it did not appear to be in use. Table 2-2 summarizes the threatened and/or endangered species listed by the U.S. Fish and Wildlife Service (USFWS) for the State of Illinois.

One threatened and/or endangered species of particular concern indigenous to the Mississippi River has been identified by USEPA in possible association with the Sites. That is the pallid sturgeon (*Scaphirhynchus albus*). The pallid sturgeon was added to the federal Endangered Species List in 1990 (55 FR 36641). The species range is large, but catch records are rare (USFWS, 1993).

The pallid sturgeon is one of the largest fish in the Mississippi drainage, growing to a length of 1.8 meters and weighing 36 kilograms. This 70 million year old species has a cartilaginous skeleton, five rows of bony scutes instead of scales, a shovel-nosed snout, a toothless mouth, and an almost reptilian tail. They are usually light brown with a white, soft, fleshy underside.

The pallid sturgeon is native to the Missouri and Mississippi Rivers and several larger tributaries. They are widely distributed, though in low numbers. The historical range is similar to the present range, except the populations are now fragmented (MFWP, 1997). The favored habitat is large, free-flowing rivers with turbid water and a variety of physical habitats (USFWS, 1993).

The four fleshy barbels in front of the mouth are used to probe the river bottom and identify prey, allowing the protrusible, vacuum cleaner-like mouth to quickly capture it (USFWS, 1998). Pallid sturgeons are bottom feeders that typically consume aquatic insects, crustaceans, mollusks, marine worms, fish and the eggs of other fish (MDOC, 2007).

Pallid sturgeons are long-lived (60 years), slow reproducing fish. Males reach sexual maturity in seven to nine years, with two to three years between spawning events. Females reach sexual maturity in seven to 15 years, with up to ten years between spawning events (USFWS, 2007). After spawning, the larvae may drift downstream for up to two weeks before settling to the bottom. This is thought to be one of the limiting factors for larval survival (MFWP, 1997).

All the 3,350 miles of riverine habitat within the pallid sturgeon's range have been adversely affected by man (USFWS, 1998). Habitat modification has blocked fish movement, destroyed or altered spawning areas, reduced food sources or ability to obtain food, altered water temperatures, reduced turbidity, and changed the hydrograph of the river system (USFWS, 1993). Approximately 28% of the riverine habitat has been impounded, creating unsuitable

lake-like habitat; 51% of the habitat has been channelized into deep, uniform channels; and the remaining 21% of the riverine habitat is downstream of dams which have altered the river's hydrograph, temperature and turbidity (USFWS, 2007).

Over-fishing, pollution, and hybridization that occur due to habitat alterations have also probably contributed to the species' population decline (USFWS, 1993). Pallid sturgeons are known to hybridize in nature with the closely related shovelnose sturgeon, and it is thought that loss of habitat and reproductive cues (water level raises) are the likely causes (USFWS, 1998). Since the two sturgeon species are so closely related, and their former unique spawning habitats have been altered or lost largely due to damming, altered hydrology, and channelization, both species are forced to spawn at the few remaining acceptable locations (USFWS, 1998). The species was also harvested for eggs, which were sold as caviar.

Pallid sturgeons are vulnerable because of unique biological characteristics, including lengthy migrations and larval drift distances, late sexual maturity, and a strong affinity to suitable habitat (MFWP, 1997).

Adult pallid sturgeon are most commonly found in areas with current velocities of zero to three miles per hour (MFWP, 2008). Swimming endurance studies of juvenile pallid sturgeon indicate that juveniles (approximately 20 cm long) have a maximum sustained swimming speed of less than five miles per hour (Adams *et al*, 1999).

Because of the fast current (approximately ten miles per hour), channelization and lack of suitable habitat in the Mississippi River in the vicinity of the Sauget Area 2 Sites, it is unlikely that any pallid sturgeon would spend a significant amount of time in the area. Therefore, even under the worst-case scenario, exposure to site-related COPECs would be minimal.

A review of the National Wetland Inventory (NWI) map for the Sites, prepared by the USFWS (USFWS, 1988), indicated that substantial portions of Sites P and Q were categorized as wetlands at the time the drawings were prepared. These wetlands are listed as palustrine wetlands, dominated by deciduous forests, shrub/scrub plant species, or emergent plant species. Palustrine wetlands are bounded by uplands or any other type of wetlands and may be situated shoreward of lakes, river channels or in floodplains (Cowardin *et al*., 1979).

Figures showing the location of the NWI identified wetlands for Sites P, R, O, S and the southern end of Site Q are presented as Figures 2-7 through 2-11. It is cautioned that wetlands shown on NWI maps may significantly overestimate the actual amount of land covered by wetlands, due to the basis by which NWI maps are prepared (aerial photointerpretation versus actual field evaluation). Field delineations are required to define the regulatory boundaries of wetlands for permitting purposes. Additionally, most of Site Q (North) and Site Q (Central), as well as northern sections of Site Q (South) have been covered by pavement and buildings, or have been buried under substantial piles of stockpiled material or debris. This physical disturbance is part of ongoing industrial activities managed by one of the property owners.

2.3 CONCEPTUAL SITE MODEL

One of the most critical elements of the BERA scoping process is the development of the CSM. The CSM describes the hypothesized source of COPECs, routes of transport, potential fate mechanisms, potential exposure pathways, and ecological receptors associated with the Sites. The CSM serves as the rationale for the development of sampling plans and protocols, the selection of assessment and measurement endpoints, and the identification of receptors of concern. The CSM can be revised as new Site-related information becomes available.

The following sections describe the CSM for the aquatic and terrestrial pathways associated with the Sites in greater detail.

2.3.1 AQUATIC PATHWAYS

The Mississippi River is one of the significant pathways associated with the Area 2 Sites and supports a number of important receptors. Figure 2-12 depicts the Aquatic Conceptual Site Model for the Mississippi River. Since the barrier wall remedy was put in place at Site R, data is available to discuss both uncontrolled and controlled groundwater discharge to the Mississippi River.

Two of the five Sites are located in close proximity to the east bank of the Mississippi River (Sites Q and R). The other three Sites (Sites O, P, and S) are located 1500 to 2000 feet east of the riverbank and east of the levee. Solid and liquid industrial and municipal wastes were

disposed of on these Sites from the 1950s to the 1980s. At two of the disposal sites, wastes were placed in former borrow pit excavations (Sites Q and R). Wastes were placed in excavations at two other disposal sites (Sites O and S); however, these excavations were made solely for the purpose of waste disposal. Wastes were placed on grade at the fifth disposal site (Site P). It is likely that the excavations at Sites Q and R went to or below the water table to maximize the amount of borrow material. It is unlikely that the excavations for Sites O and S extended to the water table since these disposal sites needed only shallow excavations, 5 to 10 feet deep, to accommodate the materials placed in them.

Site-specific geologic data show that the unconsolidated deposits range from 140 feet thick near the river to about 110 feet in the eastern part of the Solutia property. Three distinct hydrogeologic units can be identified: 1) a Shallow Hydrogeologic Unit (SHU), 2) a Middle Hydrogeologic Unit (MHU) and 3) a Deep Hydrogeologic Unit (DHU). The 30 ft. thick Shallow Hydrogeologic Unit includes the Cahokia Alluvium (recent deposits) and the uppermost portion of the Henry Formation. This unit is primarily an unconsolidated, fine-grained silty sand with low to moderate permeability. The 40 ft. thick Middle Hydrogeologic Unit is formed by the upper to middle, medium to coarse sand portions of the Henry Formation. It contains a higher permeability sand than found in the overlying shallow Hydrogeologic Unit and these sands become coarser with depth. At the bottom of the aquifer is the 40 ft. thick Deep Hydrogeologic Unit, which includes the high permeability, coarse-grained deposits of the lower Henry Formation. The zone is estimated to be about 40 feet thick.

The area is very flat and surface drainage is predominantly by infiltration rather than surface runoff. Surface elevations at the site slope to the west towards the river. Depth to water beneath the Sites varies based on seasonal fluctuations, location, and the flood stage of the Mississippi River. In general, depth to water varies from less than 10 feet to about 20 feet deep. Groundwater flow direction is from east to west with groundwater discharging to the Mississippi River, except during high river stages.

COPECs that are discharged to the Mississippi River through groundwater must first pass through the sediments of the river channel prior to entering the water column. In coarse-grained sediments with little organic material, the dissolved groundwater-borne COPECs will pass directly through the sediments and into the water column with only minimal attenuation due to

adsorption. In fine-grained or organic rich sediments, a portion of the groundwater-borne constituents may adhere to sediment particles. Whether the constituents remain in the sediment or are dissolved again will depend on their chemical characteristics. Those chemicals with high organic carbon partition coefficient (K_{oc}) values will have a greater affinity for sediment, especially sediment that is high in organic matter. Such constituents would tend to remain sorbed onto sediment particles and migration would occur as a result of sediment movement, not chemical movement.

Pelagic fish and benthic macroinvertebrates could be exposed to COPECs that are found in sediments, though the degree to which COPECs may be taken up by these organisms is a direct function to the bioavailability of the COPECs. COPECs that are not bioavailable will remain bound to sediment particles, where others constituents may be released into the pore water between the sediment particles or into the water column and thereby be expose biological organisms. Sediment contact to the bottom-feeding fish species such as the pallid sturgeon is expected to be higher than for more pelagic species that tend to occupy the water column. However, habitat availability is a driving force in determining the potential exposure to both fish and benthic invertebrates noting that if the habitat is not suitable for the presence of a particular species, than the exposure potential is limited.

The primary mechanisms by which chemicals migrate from sediments into the water column are through desorption from sediment particles, resuspension via physical disturbance and resuspension followed by food chain transport. COPECs that are dissolved in groundwater and adsorb onto sediment particles as groundwater wells up through the sediment base may desorb from the sediment particles over time, depending upon the K_{oc} value. For some high K_{oc} constituents, such as PCBs and chlorinated pesticides, desorption from sediment particles, especially those with a high organic content, is very slow, if not minimal. For other constituents, such as polycyclic aromatic hydrocarbons (PAHs) and volatile organic solvents, desorption is much more rapid and can lead to a steady source of the constituent into the water column.

A physical disturbance of the sediment by anthropogenic activities like dredging and prop wash from boats, or natural activities such as flooding can cause resuspension of the sediments followed by desorption of chemicals to the water column. This resuspension may be long- or short-term depending upon the size and solubility of the compound and the size of the sediment

particle. Re-suspended particles to which these constituents are sorbed can be either organic matter or inorganic particulates. While in the water column, pelagic flora and fauna may be directly exposed to the re-suspended chemicals as they are transported downstream to other sites. These mobilized constituents in surface water may then be transported through the food chain to higher order trophic levels (i.e., piscivorous and omnivorous wildlife).

Once in the dissolved phase in surface water, the primary migration pathways for chemicals that are transported by groundwater and discharged to surface water would be diffusion throughout the water body. The process of diffusion is an ameliorating process because the compound is reduced in concentration. Diffusion is further enhanced by the flow of water within the river upstream to downstream that moves the diluted chemicals out of the recharge zone.

Another potential migration pathway to the Mississippi River is discharge via storm water runoff. Because Sites O, P, and S are found east of the flood control dike that runs parallel to the river, stormwater runoff would not be a concern. This pathway is not likely to be a major migration pathway at the Sites west of the flood control dike because the areas are covered with vegetation, soil caps, or impermeable pavement. Should it occur, surface water runoff would carry COPECs to the Mississippi River that are either dissolved in the water or adsorbed onto soil or sediment particles. While runoff from Site R is likely limited due to the vegetation over the present cap, there are some areas of Q where runoff may occur. Once in the river, dissolved or suspended COPECs in surface water would be diluted and transported as described above.

The aquatic pathways described in this section also apply to the ponded areas located in the southern portion of Site Q. A conceptual CSM for the ponded areas within Site Q is presented as Figure 2-13. COPECs that are present in the surrounding soils may migrate into the ponds, thereby exposing biota that use, or live, in the ponds. The aquatic community that is present in the ponds is extremely limited and restricted to early successional aquatic plants and some early colonizing benthic invertebrates. Fish are only found in the ponds if a flooding event from the Mississippi River washes them into the ponds. However the ponds may serve as a water source for terrestrial vertebrates and a breeding spot for amphibians or aquatic birds.

2.3.2 TERRESTRIAL PATHWAYS

A CSM for the terrestrial portion of the Sites is presented as Figure 2-14. The migration of COPECs within soils may result in either direct exposure through contact with the soil or indirect exposure through the food chain to faunal communities supported by the available habitat at the Sites. Biota may come in direct contact with chemicals in soil while foraging and/or burrowing. The vectors by which chemicals in the soil may potentially be introduced into biota are direct ingestion (primary source), dermal absorption, or inhalation. The USEPA has determined that inhalation comprises less than 0.1% of total exposure and direct dermal contact comprises approximately 1 to 11% of total exposure (USEPA, 2000a). Indirect exposure occurs when a COPEC is assimilated by a species (e.g., prey/food item) at one trophic level, bioaccumulated by that trophic level, and transferred to the next trophic level through consumption.

Terrestrial receptors may also be exposed to COPECs present in surface water. This pathway is considered to be minor, since most small mammals (particularly rodents) obtain their water through ingestion of plants with high water content, rain puddles collected on the ground or on impervious surfaces, and from dew (Vaughn, 1986). Larger carnivores may drink from ponds, rivers, puddles, or lakes. Terrestrial receptors may also be exposed to COPECs in surface water (and sediment) through either incidental ingestion or through direct contact. Birds may be exposed through the accumulation of soil and sediment by use of these materials as grit.

2.4 IDENTIFICATION OF RECEPTORS OF INTEREST

This BERA utilized an evaluation of representative receptors as indicator species of higher trophic level risks in the aquatic and floodplain environment at the Sites. The selection of these receptors of interest (ROIs) was based on detailed discussions with representative of USEPA and its contractor, CH2MHill. Beginning in late 2000, a series of project meetings were held with USEPA, IEPA, U.S. Fish and Wildlife and other agencies to discuss the scope of the ecological risk assessment for the Sites. The discussion culminated in the identification of the receptors, which were first proposed in the Ecological Risk Assessment Work Plan (Appendix I-A). Following comments that were provided by USEPA and its contractor, as well as other agencies on the Draft SSP, the Final SSP was submitted to the USEPA and approved, which identified the ROIs used in this BERA.

The following ROIs were selected for use in preparing this BERA:

For the Mississippi River aquatic community:

- The benthic macroinvertebrate community;
- Fish (Pallid sturgeon, gizzard shad, channel catfish, and drum);
- Mink (*Mustela vison*); and
- Osprey (*Pandion haliaetus*).

Benthic invertebrates were selected as ROIs because they have the greatest exposure to bottom sediments that potentially contain COPECs, and they are an important link in the aquatic food chain as a food source for bottom feeding fish species in the river. Fish were selected as ROIs because they are the dominant organisms in the water column and they may be exposed to COPECs in sediments and surface water. Fish represent a food source to higher order predators (both aquatic and semi-aquatic) and are important for both recreational and commercial anglers. The species evaluated include water-column and bottom-dwelling species, such as the pallid sturgeon.

The mink and osprey were selected as upper trophic level ROIs. Both species are either found in the area, or have the potential for being found in the area. They both feed on fish, so they can be tied via the food web to the sediments and surface water of the Mississippi River. Additionally, both species are sensitive to constituents that biomagnify up the food web. From a habitat standpoint, the riverbank adjacent to the Sauget Area 2 Sites is not suitable habitat for any fish-eating mammal because much of the 14,000 linear foot riverbank is covered with stone riprap, not the vegetative cover required by the animal. The remainder of the bank contains pier, pilings, buildings and other human disturbances, which would further preclude mink from inhabiting the area.

For the floodplain terrestrial community:

- Prairie vole (*Microtus ochrogaster);*
- Short-tailed shrew (*Blarina brevicauda*); and
- Red fox (*Vulpes vulpes)*.

The prairie vole was selected as a ROI because it is likely to be the dominant herbivore within the habitat provided by the Sites and, with its small home range, could likely spend its entire life span within a Site. Shrews were chosen as a ROI because a large portion of their diet consists of earthworms that live within the soils of the Sites. However, the habitat afforded by the majority of the disposal sites is not particularly supportive of short-tailed shrews (Ballenger, 2000). The red fox is an upper trophic level carnivore that potentially feeds on either shrews or other small rodents within the Sites.

Relative to the Site Q (Ponds), realistic ROIs cannot be selected as the two ponds are ephemeral in nature and do not support a long-term ecological community. Instead, the ponds cycle back and forth between supporting an early emergent aquatic community and supporting a terrestrial community. The ponds only support a fish community following overbank flooding of the Mississippi River. The community would become greatly distorted as the ponds shrink in size due to drying. The loss of habitat and the inability for new individuals to be recruited into the ponds would result in a population dominated by large, scavenging species that are tolerant of diminishing water quality conditions. When the ponds evaporate, the fish communities are lost.

2.5 SELECTION OF ASSESSMENT AND MEASUREMENT ENDPOINTS

Assessment endpoints are explicit expressions of the actual environmental values (e.g., ecological resources) that are to be protected. Valuable ecological resources include those without which ecosystem function would be significantly impaired, those providing critical resources (e.g., habitat), and those perceived as valuable (e.g., endangered species). Assessment endpoints are selected based on key ecosystems, communities, or ecological functions; contaminants present; the extent and magnitude of contamination; mechanisms of toxicity; and potential exposure pathways. It is not practical or possible to directly evaluate risks to all of the individual components of the ecosystem at the site, so assessment endpoints are used to focus the risk assessment on particular components of the ecosystem that could be at greatest risk from exposure to contaminants associated with the site.

These assessment endpoints were identified and are discussed further in the USEPA-approved Ecological Risk Assessment Work Plan (Appendix I-A). The following assessment endpoints were defined for the BERA:

- Assessment Endpoint #1: Evaluate the potential for adverse changes in the survival, reproduction, and growth of fish populations utilizing the Mississippi River in the vicinity of the Sites resulting from exposures to COPECs in sediments, surface waters, and/or prey;

- Assessment Endpoint #2: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of piscivorous wildlife utilizing the Mississippi River in the vicinity of the Sites resulting from exposures to COPECs in prey and in surface water;

- Assessment Endpoint #3: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of vermivorous wildlife utilizing the five Sites resulting from exposures to COPECs in prey and in soil;

- Assessment Endpoint #4: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of herbivorous wildlife utilizing the five Sites resulting from exposures to COPECs in soils and in vegetation;

- Assessment Endpoint #5: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of carnivorous wildlife utilizing the five Sites resulting from exposures to COPECs in prey and in surface water;

- Assessment Endpoint #6: Evaluate the potential for adverse changes in the survival, reproduction, and growth of potential fish populations within the two ponds resulting from exposures to COPECs in surface waters and in sediments; and

- Assessment Endpoint #7: Evaluate the potential for adverse changes in the survival, reproduction, and growth of the Federally endangered pallid sturgeon utilizing the

Mississippi River in the vicinities of the Sites resulting from exposures to COPECs in sediments, surface waters, or in prey.

The BERA has evaluated ecological risks relative to these assessment endpoints in the Mississippi River and the five disposal sites. Since assessment endpoints cannot be measured directly, measurement endpoints have been identified. Measurement endpoints typically have specific strengths and weaknesses related to the factors discussed above. Therefore, it is common practice to use more than one measurement endpoint to evaluate each assessment endpoint. These measurement endpoints are discussed further in the USEPA-approved Ecological Risk Assessment Work Plan (Appendix I-A). The specific measurement endpoints that were used in this BERA are as follows:

<u>Assessment Endpoint #1:</u> Evaluate the potential for adverse changes in the survival, reproduction, and growth of fish populations utilizing the Mississippi River in the vicinity of the Sites resulting from exposures to COPECs in sediments, surface waters, and/or prey.

Measurement Endpoints:

a. Comparison of sediment COPEC concentration data appropriate sediment quality benchmarks for the protection of benthic macroinvertebrates. .

b. Evaluation of sediment bioassay data.

c. Comparison of surface water COPEC concentrations from all sampling locations to relevant ecologically-based benchmarks, including the State and Federal Ambient Water Quality Criteria for the protection of aquatic life.

d. Evaluation of surface water bioassay data. The ability of surface water to support viable fish populations was assessed by evaluating survival data from bioassays conducted on surface water collected upstream, downstream and in the vicinity of the Sites.

e. Evaluation of whole body COPEC concentrations in fish collected upstream, downstream and in the vicinity of the Sites. The fish tissue residue concentrations

used for this line of evidence were collected and analyzed by Menzie-Cura as part of the Krummrich work (Menzie-Cura, 2001). The body burden levels were compared to tissue residue data from the literature (e.g., Jarvinen and Ankley, 1999) that indicates potential ecological concerns.

Assessment Endpoint #2: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of piscivorous species utilizing the Mississippi River in the vicinity of the Sites resulting from exposures to COPECs in prey and in surface water.

Measurements Endpoints:

a. Risks to mink were estimated by comparing an average daily dose for each COPEC to a toxicity reference value (TRV). Mink exposure concentrations were estimated using a food chain model with fish COPEC body burdens and surface water COPEC concentrations from the Mississippi River and from the large pond.

b. Risks to ospreys were estimated by comparing an average daily dose for each COPEC to a TRV. Osprey exposure concentrations were estimated using a food chain model with fish COPEC body burdens and surface water COPEC concentrations from the Mississippi River. Fish from the large pond were not used in the exposure calculation due to the size and shallow depth of the pond that would preclude its use by osprey as a feeding area.

Assessment Endpoint #3: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of vermivorous wildlife resulting from exposures to COPECs in prey and in soil.

Measurements Endpoints:

a. Risks to short-tailed shrews were estimated by comparing a daily dose for each COPEC to TRVs. Shrew exposure concentrations were estimated using a food chain model with earthworm COPEC body burdens developed through earthworm

bioaccumulation tests, terrestrial invertebrate COPEC body burdens collected through field studies in support of this BERA, and surface soil COPEC concentrations. It is believed, based on habitat observations made during the fieldwork conducted in support of this BERA, that much of the habitat in the disposal sites is not suitable for the short-tailed shrew (Ballenger, 2000). However, the value of this endpoint is in the estimation of risks to higher trophic level organisms as measured in Assessment Endpoint #5. As such, the shrew is considered more as a transfer mechanism to higher trophic level organisms, as opposed to an endpoint receptor.

b. Risks to short-tailed shrews were qualitatively examined through the review and comparison of soil chemical data to *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process: 1997 Revision* (ORNL, 1997). The objective was to qualitatively assess whether COPECs exist at concentrations that would limit the diet of the short-tailed shrew.

Assessment Endpoint #4: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of herbivorous wildlife resulting from exposures to COPECs in soils and in vegetation.

Measurements Endpoints:

a. The ability of the plant community to provide habitat for herbivorous wildlife was measured by the comparison of concentrations of COPECs in surface soils at the Sites to surface soil quality benchmarks for the protection of plants.

b. Risks to prairie voles were estimated by comparing a daily dose of each COPEC to TRVs. Exposure concentrations to prairie voles were estimated using a food chain model with plant tissue and surface soil COPEC concentrations.

Assessment Endpoint #5: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of carnivorous wildlife utilizing resulting from exposures to COPECs in prey and in surface water.

Measurement Endpoints:

a. Risks to the red fox were estimated by comparing a daily dose of each COPEC to TRVs. Exposure concentrations to red fox were estimated using a food chain model with vole, shrew and surface water COPEC concentrations.

<u>Assessment Endpoint #6:</u> Evaluate the potential for adverse changes in the survival, reproduction, and growth of potential fish populations within the two ponds located in the southern end of Site Q resulting from exposures to COPECs in surface waters and sediments.

Measurement Endpoints:

a. Comparison of sediment COPEC concentrations to appropriate sediment quality benchmarks for the protection of benthic macroinvertebrates.

b. Evaluation of sediment bioassay data.

c. Comparison of COPEC concentrations in surface water from all sampling locations to relevant ecologically-based benchmarks, including the State and Federal Ambient Water Quality Criteria for the protection of aquatic life.

d. Evaluation of surface water bioassay data. The ability of surface water to support viable populations of fish was assessed by evaluating survival data from bioassays conducted on surface water samples collected upstream, downstream and in the vicinity of the Sites.

e. Evaluation of whole body COPEC concentrations in fish collected upstream, downstream and in the vicinity of the Sites. The fish tissue residue concentrations used for this line of evidence were collected and analyzed as part of a project at the nearby Krummrich site (Menzie-Cura, 2001). Fish body burden levels were compared to tissue residue data from the literature (e.g., Jarvinen and Ankley, 1999) to evaluate risks.

<u>Assessment Endpoint #7:</u> Evaluate the potential for adverse changes in the survival, reproduction, and growth of the Federally endangered pallid sturgeon utilizing the Mississippi River in the vicinities of the Sites resulting from exposures to COPECs in sediments, surface waters, or in prey.

Measurement Endpoints:

1. A qualitative evaluation was conducted because limited toxicity information was available for the pallid sturgeon or any other sturgeon species. The same measurement endpoints used for the Mississippi River were also used for evaluating the viability of the endangered pallid sturgeon (endpoints 1a through 1e).

3.0 AQUATIC ECOLOGICAL EXPOSURE ASSESSMENT

This section describes the data used in the development of the aquatic assessment and the selection of the aquatic COPECs evaluated in this BERA.

3.1 DATA USED IN THE AQUATIC ECOLOGICAL ASSESSMENT

Chemical data used for the aquatic assessment includes data collected by Menzie-Cura & Associates in 2000, by AMEC in November 2002, and by URS in 2005 and 2007. All chemical data that by AMEC were collected in accordance with the *Aquatic Field Sampling Plan* (URS, 2002c) and as per subsequent modifications described in the *Aquatic Field Sampling Report* (AMEC, 2003b). AMEC (2003b) also provides detailed information on aquatic sampling locations, sampling methods, and quality assurance/quality control (QA/QC) for the 2002 sample collections. URS collected supplemental surface water and sediment samples from the Mississippi River in September of 2005 and March of 2007. Detailed information on aquatic sampling locations, sampling methods, and quality assurance/quality control (QA/QC) for the 2007 sample collections was provided by URS in the Data Validation Report dated July 5, 2007 (URS, 2007). All concentrations presented by the laboratory were reported on a dry weight basis for surface soils and sediments and on a wet weight basis for fish tissue.

All of the fish data from the Mississippi River used in this BERA was based on information collected by Menzie-Cura & Associates from October through November 2000 as part of the baseline ecological risk assessment for the aquatic habitat adjacent to disposal Site R and near the W. G. Krummrich Plant in Sauget, IL (Sauget Area No. 1; Menzie-Cura Associates, 2001). Data prepared by Menzie-Cura included descriptions of the fish community and fish tissue analytical data. As the fish study was performed by Menzie-Cura and was not implemented by AMEC Earth & Environmental, observations of the fish community and feeding habitats of the fish collected in the study are not included in the BERA. The approach to using the Menzie-Cura data was outlined in Addendum 2 to Volume 3 of the SSP, *Surface Water, Sediment and Aquatic Biota Sampling Project Plans.*

3.1.1 AQUATIC SAMPLING LOCATIONS

Sediment and water samples were collected by AMEC and by URS from seven sampling areas (labeled R1, R2, PDA, R3, R4, R5, and R6), located along some 14,000 ft of the Mississippi River (Figure 3-1), with R1 being the most upstream area and R6 the most downstream area. Each of the "R" sampling areas (with the exception of R5) consisted of seven sampling locations, three located on a transect approximately 50 feet from the riverbank (the "A" transect), three more on a transect approximately 150 feet from the riverbank (the "B" transect"), and one located about 300 ft from the riverbank (the "C" transect). The extensions "U", "M" and "D" on these sampling locations refer to upstream, middle and downstream portions of the transects, respectively. The area designated as R5 had one additional location in each of the "A" and "B" transects. These two additional sample locations were labeled with an "N" extension indicating that they were north of the most upstream (or "U") extension locations. There were a total of 44 "R" sampling locations and the water column depth at these locations varied from about 2 feet to 32 feet. The "R" sampling locations and their GPS coordinates are summarized in Table 3-1.

The PDA sampling locations utilized by URS were originally surface water and sediment locations sampled by Menzie-Cura in 2000. In 2005, after the installation of the groundwater barrier wall along the river face of Site R, URS attempted to collect additional sediment and surface water samples from PDA-2, -3, -4, -5, -9, and -9A. Two of these locations appear to be located approximately 50 feet from the riverbank (in conjunction with the "A" transect), three more on a transect approximately 150 feet from the riverbank (in conjunction with the "B" transect"), and one located about 300 ft from the riverbank (in conjunction with the "C" transect). There were a total of 6 "PDA" locations sampled for the purposes of this BERA. In 2007, URS attempted to collect subsequent surface water and sediment data from PDA locations 2, 3, 4, 5, and 9.

The R1 plot area was located upstream of Site P (of Sauget Area 2 Sites), between the MacArthur Railway Bridge and Interstate Highway Bridge (Figure 3-1). Data collected from the R1 plot area are used as "reference" values for the Mississippi River. Data from all other sampling locations (areas R2 - R6) are treated as "Site" related.

As described earlier, fish tissue sampling from the Mississippi River was not conducted in the AMEC 2002 study. Instead, fish tissue data collected by Menzie-Cura & Associates (Menzie-Cura, 2001) were used. Fish samples were collected from the portion of Mississippi River adjacent to Site R extending approximately 300 feet into the river channel. The Site area, referred to as the PDA, is located immediately downstream of the old power plant and situated between sampling plots R2 and R3 in this study. In addition to the PDA, Menzie-Cura collected fish samples from two other areas: an upstream reference area, referred to as UDA (Upstream of Discharge Area) situated adjacent to Site P, in the area between sampling plots R1 and R2 in this report and a downstream reference area, referred to as DDA (Downstream of Discharge Area), situated downstream of plot area R6 (Figure 3-1).

3.1.2 SEDIMENT AND SURFACE WATER SAMPLING

Field characterization of sediment properties were conducted during the 2002 sampling event and included visual observation of grain size, presence/absence of organic matter, and presence/absence of any benthic organisms. Water quality parameters (pH, temperature, conductivity, dissolved oxygen, and turbidity) were also collected in 2002 at each sampling location using a Horiba (Model U-22) water quality instrument. Water quality parameters were measured near the bottom (approximately one foot above the sediment layer), at mid-depth, and at the surface. These field observations are summarized in Tables 3-2 and 3-3, respectively.

In 2002, sediment samples were collected for the analysis of grain size, Total Organic Carbon (TOC), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, herbicides, PCBs, dioxins (at selected locations) and metals. Grain size results are presented in Appendix II-A. Bulk sediment samples were also collected for chronic bioassay (toxicity) testing. In 2003, sediment samples were collected from the two ponds in Site Q (South) and analyzed for VOCs, SVOCs, herbicides, pesticides, PCBs, metals, dioxins/furans and TOC. In addition to the chemical analyses, the sediment was also submitted for chronic bioassay testing and bioaccumulation studies. In 2005 and 2007, after installation of the groundwater barrier wall at Site R, sediment samples were analyzed for VOCs, SVOCs, pesticides, herbicides, and metals only. Laboratory results for sediments are provided in Appendix II-B.

In 2002, surface water samples were collected for the analysis of hardness, VOCs, SVOCs, pesticides, herbicides, PCBs, dioxins (at selected locations), and dissolved and total metals. Surface water samples were also collected for acute and chronic bioassay (toxicity) testing. In 2003, surface water samples were collected from the two ponds in Site Q (South) and analyzed for VOCs, SVOCs, herbicides, pesticides, PCBs, total and dissolved metals, and dioxins/furans. In addition to chemical analyses, the surface water was also submitted for acute and chronic bioassay testing. In 2005 and 2007, after installation of the groundwater barrier wall at Site R, surface water samples were analyzed for VOCs, SVOCs, herbicides, pesticides, dissolved metals, and total metals (2005 only). Laboratory results for surface water are provided in Appendix II-C.

The revised Field Sampling Plan (Addendum to Volume 3 of the RI/FS support sampling plan, AMEC 2003b) called for sampling of sediments for benthic invertebrate community structure analysis only if field observations indicated that the substrate was substantially different from those sediments observed in the Sauget Area 1 work. Based on this, sediment samples were collected for benthic community structure analysis only at two locations, one from the Site (plot area 6) and one from the reference area for comparison purposes. This activity was not listed as a line of evidence in the Ecological Risk Assessment Work Plan (Appendix I-A), and is being used on a qualitative basis within this BERA.

3.1.3 TOXICITY TESTING

Bioassays are direct measures of the relative toxicity of constituents in a particular matrix. The ability of the benthic community to potentially perform its role as a prey base for fish was assessed by evaluating the survival rates of bioassay test organisms following exposure to sediments from the Site and reference areas. Sediments were subjected to the following bioassays:

- *Hyalella azteca,* 10-day chronic survival and growth test
- *Chironomus tentans*, 10-day chronic survival and growth test

Sediment bioassays were conducted in accordance with U.S. Environmental Protection Agency protocols outlined in “Methods for Measuring the Toxicity and Bioaccumulation of Sediment-

associated Contaminants with Freshwater Invertebrates, Second Edition" (USEPA, 2000b) and with American Society for Testing and Materials (ASTM) protocols outlined in "Standard Guide for Conducting Sediment Toxicity Tests with Freshwater Invertebrates" (ASTM, 1994). The protocols are presented in Appendix II-D. The results of the sediment bioassays are presented in Appendix II-E.

The ability of surface water to potentially support viable populations of fish was assessed by evaluating the survival rate of test organisms. The following surface water bioassays were conducted in support of this BERA:

- *Pimephales promelas,* acute (4-day) and chronic (7-day) growth and survival test
- *Ceriodaphnia dubia,* acute (2-day) and chronic (7-day) survival and reproduction (neonate production) test

P. promelas and *C. dubia* bioassays were conducted in accordance with USEPA protocols outlined in "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" (USEPA, 1989b). The protocols are presented in Appendix II-D. The results of the surface water bioassay testing are presented in Appendix II-F.

3.1.4 BIOACCUMULATION TESTING

Bioaccumulation tests were conducted on Site sediments as described in the Field Sampling Plan. These results were used as one line of evidence together with toxicity test results and chemical analysis data. Bioaccumulation tests were run for 28 days using *Corbicula fulminea* (Asiatic clam). At the end of the experimental period, surviving clams were frozen and shipped to the analytical laboratory for the analysis of target analytes. Detailed experimental procedure and methods are given in Appendix II-D. Results of chemical analysis of clams from bioaccumulation testing are given in Appendix II-G.

3.1.5 FISH SAMPLING

As described earlier, fish tissue collection was not conducted in the Mississippi River for this study. Fish collected by Menzie-Cura for the Krummrich ecological risk assessment were used

for this report. Details on fish sampling procedures can be found in Menzie-Cura Associates (2001) report. A brief summary is provided here.

Gizzard shad, channel catfish, and drum were collected by Menzie-Cura for the Krummrich ecological risk assessment. These warm water fish species were selected because they a) reflect local sediment and water quality conditions since the species include both bottom-dwelling and water-column feeders; b) are abundant local residents with a limited foraging area; c) can be exposed to sediment as well as surface water; d) represent fish and higher order predators that feed on smaller fish and invertebrates; and e) can serve as a prey base for avian and mammalian species. The fish tissue data obtained from Menzie-Cura is presented in Appendix II-H.

3.1.6 DATA VALIDATION, DATA QUALIFIERS AND USE OF DATA

Data validation on all chemical analysis was conducted by URS Corporation (URS, 2003b). The data validators applied the following qualifiers where warranted:

B Method blank contamination. The associate method blank contains the target analyte at a reportable level.

D Compound concentrations reported from a secondary dilution analysis.

J The associated numerical value is an estimated quantity due to quality control exceedance(s). The value is used for project decisions as an estimated result.

P Greater than 25% (40% for CLP) difference for detected concentrations between the two GC columns.

R This data was rejected due to severe or cumulative exceedance of quality control criteria. The value was not used for project decisions and was excluded in all statistical analysis.

U The compound was analyzed for, but was not detected. The associated numerical value is the sample detection/quantitation limit. One-half the reporting limit was used for the estimation of average concentrations.

UJ The compound was analyzed for, but was not detected. The associated numerical value is the sample detection/quantitation limit, and is an estimated quantity. One-half the reporting limit was used for the estimation of average concentrations.

***** LCS, LCSD, MS, MSD or Surrogate exceeds the control limits.

The data validators recommend that, due to low precision, the results of acetone and bromomethane be used with caution when using the data for decision-making. There were no other major data quality issues.

3.1.7 CALCULATION OF PCB AND DIOXIN/FURAN CONCENTRATIONS

Surface water, sediment, and fish samples were analyzed for PCB homologs, polychlorinated dibenzo-p-dioxin (PCDDs) and polychlorinated dibenzofuran (PCDFs) congeners. PCBs, PCDDs and PCDFs are complex mixtures of individual congeners that exhibit different solubilities, volatilities, degradation, metabolism, and toxicities.

PCBs were only detected in sediments, and were not detected in surface water, bioaccumulation test organisms (clams) or in fish tissue. At least one PCB homolog was detected in five sediment samples from the following locations: four from Plot R3 (locations R3AD, R3AM, R3AU, and R3BM), and one from Plot R4 (R4BM). In these samples, the concentrations of individual homologs (or one-half the detection limit for a non-detect) were summed up on a sample-by-sample basis. If a homolog was never detected in any of the sediment samples, then it was not included in the total.

Dioxins and furans were collectively evaluated as dioxin Toxicity Equivalence Quotient (TEQ) concentrations in various media. Of the various dioxins/furans that bind to an intracellular protein called the aryl hydrocarbon receptor (AhR), 2,3,7,8-TCDD is the most toxic form. The toxicity of other congeners of dioxins and furans were compared to the toxicity of 2,3,7,8-TCDD by the application of Toxicity Equivalency Factor (TEF) for fish developed by the World Health Organization (WHO). TEQ concentrations in samples were calculated using the following equation (Van den Berg *et a*l., 1998):

$$TEQ = \sum_{n1}\left[PCDD_i \times TEF_i\right] + \sum_{n2}\left[PCDF_i \times TEF_i\right]$$

where,

TEF = the toxic equivalency factor for dioxin (PCDD) or furan (PCDF) congener "i"
n = number of dioxin-like congeners detected in a given medium.

TEQs for dioxin/furans were calculated for each medium by multiplying the detected concentration (or one-half the detection limit for a non-detect, as appropriate) of each individual congener by its TEF and adding the products to obtain the TEQ. If a congener was never detected in a particular medium or area, it was not included in the total. The TEQ concentration was then compared to appropriate screening numbers and threshold values. Calculated TCDD-TEQs are presented in Table 3-4.

3.2 DATA ANALYSIS AND AQUATIC COPEC SELECTION

The results from the chemical analyses for sediments and surface water in the Mississippi River were used to develop the list of COPECs for the aquatic environment. The sample locations and number of proposed samples were developed during discussions with the USEPA and were biased to reflect potential worst-case conditions in the aquatic environment.

COPECs in sediments and surface water were identified through a multi-step process. Step 1 included the screening of chemical data obtained through sediment and surface water sampling. As per the USEPA-approved work plan, the initial screening of sediment and surface water data included:

- Comparison to Background – The BERA eliminated from further analysis a constituent that occurred below the maximum concentration measured in the reference area for a given medium.

- Frequency of Detection – The BERA eliminated a constituent from the evaluation if the constituent was detected in less that 5% of samples from a particular medium. A qualitative discussion of "hotspots" was made for those constituents that were removed due to the frequency of detection.

If the constituent was not eliminated through this initial screening process, it was carried through the full risk assessment process. The analytes retained as COPECs in sediment are listed in Tables 3-5, 3-6 and 3-7. The analytes retained as COPECs in surface water are listed in Tables 3-8, 3-9 and 3-10.

3.2.1 ANALYSIS OF SEDIMENT AND SURFACE WATER CHEMICAL DATA

Sediment and surface water data from the reference area (R1 plot area) data were analyzed separately from the Site area (plot areas R2 through R6) data. For all analyzed constituents, maximum concentrations, arithmetic average concentrations, and frequency of detection were calculated for the reference area and the Site area. A summary of these calculations for sediment is provided in Tables 3-11, 3-12 and 3-13. A summary of calculations for surface water is provided in Tables 3-14, 3-15 and 3-16.

Concentrations of COPECs in surface water and sediment that were carried through the initial screening process were compared to relevant ecologically based threshold benchmarks described in Section 5.1.

3.2.2 ANALYSIS OF SEDIMENT TOXICITY DATA

Sediments were subject to toxicity tests using two invertebrate species, *H. azteca* and *C. tentans*. The endpoints of the tests were survival and growth. Sediment bioassay samples were grouped in the laboratory by sampling area. In addition, each group was run with a laboratory control sample. Survival data were reported as percent survival, whereas growth was recorded as average mass per organism. Summary results of the sediment toxicity tests using *H. azteca* and *C. tentans* are shown in Table 3-17, and the complete result of statistical tests are provided in Appendix II-E.

Prior to statistical analysis, all percent survival data were transformed using an arcsine-square root transformation, consistent with the approach taken in the Krummrich ERA that allows the application of parametric statistical tests. To determine whether significant mortality occurred, mean survival for each field sample was compared to the mean survival of the laboratory control

sample using Dunnett's one-way ANOVA. An alpha of 0.05 was used to assess the statistical significance.

In addition to survival, comparison of mean growth levels was conducted using raw untransformed data for the Dunnett's one-way ANOVA at an alpha of 0.05.

3.2.3 Analysis of Sediment Bioaccumulation Test Data

Sediment bioaccumulation tests are designed to evaluate the bioaccumulation potential of COPECs in the tissue of sediment-dwelling organisms. While not considered as an actual measurement endpoint, this evaluation can be used to assess the potential for COPECs in sediment to accumulate in tissue.

Chemical analysis results of clam tissue from bioaccumulation tests are provided in Appendix II-G. For all target analytes, maximum, arithmetic average and frequency of detection were calculated for Site samples (plot areas R2 through R6), reference samples (plot area R1), and controls (Table 3-18).

Chemical data from clam tissue was compared to the values presented in the web-based *Environmental Residue Effects Database (ERED)* developed by the US Army Corps of Engineers (2002) as a means of determining potential impacts to bivalves that might exist in sediments found in the river adjacent to the Sites. The results of that comparison were then compared to fish tissue body burdens determined by Menzie-Cura in a qualitative manner. That comparison provided insight into the accumulation of COPECs from the sediments up through the aquatic food chain.

3.2.4 Analysis of Surface Water Toxicity (Bioassay) Data

As described earlier, surface water toxicity tests were conducted using *P. promelas* and *C. dubia*. Endpoints assessed were survival and growth (mean weight per fish). For *C. dubia* the endpoints assessed were survival and neonate production. Samples were grouped by sampling area and analyzed separately. Each grouping of samples was evaluated against its respective

laboratory control sample. Results of the chronic bioassays for *P. promelas* and *C. dubia* are summarized in Table 3-19.

Fathead Minnows: To assess whether significant toxicity was present during the bioassay of fathead minnows, statistical testing was conducted using a tiered approach. This approach was designed to identify significant differences in survival first between individual samples and their respective laboratory control samples, second between individual samples and other intra-area samples, and third between individual samples and other inter-area samples. The goal of the statistical analysis was to identify spatial patterns in toxicity that could be compared to corresponding exposures (surface water COPEC concentrations), which ultimately yields an exposure/response relationship. Statistical tests and results are summarized in Appendix II-F.

The first tier of the assessment was to determine whether significant mortality occurred for individual field samples when compared to their clean, laboratory control water samples. To assess this, the mean survival for field samples was compared to the laboratory control sample using Dunnett's one-way Analysis of Variance (ANOVA). An alpha of 0.05 was used to assess the statistical significance. Prior to running the ANOVA, all percent survival data was transformed using an arcsine square root transformation.

Growth data from field samples were compared to laboratory control results using the Dunnett's one-way ANOVA with an alpha of 0.05.

If the result of the Dunnett's one-way ANOVA for either survival or growth indicated that field sample results were significantly different (lower) than their respective laboratory control (i.e., the field samples were experiencing higher mortality or lower growth) then a Tukey's pair wise ANOVA with a family error rate or alpha of 0.05 was run to determine if there were significant differences in mean mortality and/or growth between individual sample location pairs.

Ceriodaphnia: To assess whether significant toxicity was present during the bioassay of *C. dubia*, test results were subject to a tiered approach similar to that described above for fathead minnows. The results of the statistical analyses for *C. dubia* are provided in Appendix II-F. The first tier of the assessment was to determine whether significant mortality to *C. dubia* occurred for field samples when compared to the clean, laboratory control water samples. To assess

this, the mean survival for field samples was compared to the mean survival of the laboratory control sample using Dunnett's one-way ANOVA. For the *C. dubia* survival analysis, control sample results were pooled because examination of those data indicated no significant differences between control survival results based on Tukey's pair wise ANOVA at an alpha of 0.05. An alpha of 0.05 was used to assess the statistical significance.

In addition to survival, *C. dubia* neonate production data from field samples were also compared to their respective laboratory control using the Dunnett's one-way ANOVA with an alpha of 0.05.

If the result of the Dunnett's one-way ANOVA for either survival or neonate production indicated that field sample results were significantly lower than the laboratory controls, then a Tukey's pair wise ANOVA with a family error rate or alpha of 0.05 was run to determine if there were significant differences in mean mortality and/or neonate production between individual sample location pairs.

3.2.5 ANALYSIS OF FISH TISSUE DATA

Exposure levels in fish were evaluated by comparing the concentrations of COPECs in fish tissue collected from the Mississippi River next to the Site to the levels in fish from reference areas. Care needs to be exercised with such a comparison because discriminating between Site-related and non-Site-related COPECs is difficult in wide ranging species such as fish.

Fish tissue data from the Krummrich report are summarized in Appendix II-H. As described earlier, the data used in this risk assessment include whole body composites of drum, gizzard shad, and channel catfish from the PDA, the UDA, and the DDA.

For all target analytes, maximum concentration, arithmetic average concentration and frequency of detection were calculated for Site samples (PDA) and reference areas (UDA and DDA). All fish species and composites from the Site area were aggregated for data analysis. Similarly, UDA fish data were analyzed together and DDA fish data were analyzed together. The results are summarized in Table 3-20.

None of the PCB homologs were detected in fish tissue. Concentrations of all detected dioxin congeners were converted to toxic equivalent (2,3,7,8-TCDD TEQ) concentrations as described in Section 3.1.7 (Table 3-21). A total of 19 target analytes (all dioxins/furans treated as one analyte - 2,3,7,8-TCDD TEQ) were detected in fish tissue and are summarized in Table 3-22. Concentrations of two compounds (2-methylphenol and 4,4'-DDE) were higher in downstream reference samples than in Site fish samples. For all other analytes, they were either not detected in reference samples or were below the maximum concentrations found in Site fish tissue. Although dioxins/furans are evaluated using a TEQ approach, concentrations of several individual dioxin congeners were higher in upstream (UDA) and/or downstream (DDA) reference area fish than in the Site (PDA) area fish. However, the 2,3,7,8-TCDD TEQ concentrations were slightly higher in Site area samples than in reference area samples.

4.0 FLOODPLAIN ECOLOGICAL EXPOSURE ASSESSMENT

This section presents the concentrations of COPECs that receptors within the floodplain community may be exposed to. These exposure concentrations include measured values in surface soil of the Sites, pond and river surface water and sediment concentrations, measured values identified in fish tissue collected from the large pond and river, and modeled calculations of exposure to higher trophic level organisms. Data used in the Floodplain Assessment portion of this BERA was collected by URS and AMEC in 2002 and by URS in 2005 and 2007. The *Field Sampling Report* (URS, 2003a), *Floodplain Area Field Sampling Report* (AMEC, 2003a), and Data Validation Report (URS, 2007) provide additional details regarding the sampling procedures and activities. Sampling activities for the pond are summarized in the *Aquatic Field Sampling Report* (AMEC, 2003b).

The floodplain community evaluated in this BERA includes the two ponds that are located at the southern end of Site Q, as well as the aquatic community supported by them. These ponds are intermittent in nature and cycle through wet and dry periods. The two significant contributors of water for these ponds are overbank flooding of the Mississippi River and rainfall. The ponds were filled in 2001 during the development of the SSP, but were both dry by December 2002.

The SSP required the collection of surface water, sediment, and fish for chemical analysis from both ponds. However, at the time of the November 2002 AMEC sampling event, the small pond was dry and only limited sampling of surface water, sediment and fish was possible from the large pond. After discussions with the USEPA in 2003, it was agreed that the original BERA would be submitted without data from the small pond, under the provision that should the pond refill, sampling would occur and the data would be provided to the USEPA. The small pond was partially filled by a significant stormwater event in May 2003 and the sampling was conducted in June 2003. The results of that sampling event were provided to the USEPA in a document entitled *Draft Baseline Ecological Risk Assessment – Addendum* (AMEC, 2004). Data and conclusions from that event have been incorporated into this Revised BERA.

It is noted that the ecological evaluation of the ponds must be considered from the standpoint that the condition of the ponds are transient and conclusions drawn by the BERA may not necessarily be representative of current conditions.

4.1 SURFACE SOIL SAMPLING RESULTS

Surface soil samples from the Sites were first collected by URS during the RI fieldwork in July and August 2002. The locations for those samples were selected based on a detailed soil gas and magnetometer survey conducted by URS Corporation in advance of the RI. Based on those data, the sample locations were biased towards the worst-case locations. As such, the samples may not necessarily be representative of each Site, only the worst-case settings in each. This approach was detailed in the USEPA-approved SSP and is noted in the Uncertainty Section (Section 8.0).

Additional soil samples were collected by URS in October 2002 and May 2005. Samples were collected from the top six inches of soil. Based on an agreement with the USEPA, soil samples collected in the northern and central sections of Site Q were not evaluated in the BERA because of a lack of habitat in that portion of the Site. Only the southern end of Site Q has sufficient habitat to support a diverse ecological community.

Ten surface soil samples and two duplicates were collected from Site P (Figure 2-2); four samples were collected from Site R (Figure 2-3); ten samples and two duplicates were collected in Site O (Figure 2-4); Two samples were collected in Site S (see Figure 2-5); 23 samples and three duplicates were collected from area Q (South) (Figure 2-6). In addition to the site samples, three off-site samples and one duplicate were collected to provide data regarding the characteristic concentrations of COPECs in non-site related soils. These background samples were used for comparison purposes in this BERA. Sample locations are shown on Figure 3-1.

Soil samples were generally biased towards areas of known contamination. The number of soil samples was first agreed to by the USEPA. Then, prior to the collection of soil samples during the RI field sampling activity, URS Corporation conducted a reconnaissance survey of the Sites using field screening techniques including analyses using a mobile laboratory and soil gas surveys. The locations of the surface soil samples were made based on those results.

Elevated concentrations of a variety of organic and inorganic COPECs were found. In general, Site R had the lowest overall soil concentrations of COPECs. Noting the temporary cap that

was placed over Site R, the lower concentrations were expected. Site O soil generally had the highest concentrations of VOCs, herbicides, and dioxins. Site S generally had the highest concentrations of SVOCs, PCBs, and pesticides. The southern end of Site Q generally had the highest concentrations of metals.

Surface soil data are presented and evaluated on a per sample site-by-site basis for the majority of the ROIs that were evaluated (with the exception of the red fox). Additionally, an average concentration or 95% upper confidence level (UCL) about the mean was calculated for each analyte in the surface soil data in each area. For the red fox, a 95% UCL and an average concentration was calculated for each analyte on a site-wide basis. Appendix III-A (Table III-A1) presents the surface soil data. A more extensive presentation of the data can be found in the *Sauget Area 2 Data Report* (URS, 2003b).

4.2 POND SURFACE WATER SAMPLING RESULTS

Two surface water samples were collected from the large pond in November 2002. At that time, less than 10% of the bottom of the pond basin contained water and the small pond had entirely dried up. Low concentrations of organic and inorganic constituents were identified in the surface water samples. Several dioxin/dibenzofuran congeners and metals were detected in these samples. Appendix III-A (Table III-A2) presents the pond surface water data used in the ecological risk assessment.

As a result of high rainfall events, both ponds had refilled with water in May 2003. In June 2003, three surface water samples were collected from each of the two ponds and analyzed for the standard suite of chemicals, and bioassay tests.

Surface water collected from the large pond demonstrated little difference between filtered and unfiltered samples for metals. This indicates that there was little suspended silt at the time of sampling. Analytical results are listed in Appendix III-A (Tables III-A2 and III-A3).

The surface water total metals concentrations from June 2003 were significantly lower than those found in surface water samples collected in November 2002. However, the dissolved metals concentrations for both sampling events were very similar. This is ascribed to the fact

that the large pond was very turbid in November and relatively clear in June. Metals were associated with the suspended sediment carried in by the Mississippi River.

Surface water collected from the small pond had COPEC concentrations similar to that found in the large pond. Analytical results are listed in Appendix III-A (Tables III-A2 and III-A3).

4.3 POND SEDIMENT SAMPLING RESULTS

One sediment sample was collected from the large pond in November 2002. Elevated concentrations of PCBs, dioxins, and metals were identified in the sample. Appendix III-A (Table III-A3) tabulates the pond sediment data used in the ecological risk assessment.

Three sediment samples were collected from each of the two ponds in June 2003. The less persistent VOCs and SVOCs were generally not present in the sediment. This was expected, since the cycle of flooding and drying would accelerate volatilization and other fate processes to degrade those compounds. The concentrations of COPECs were similar between the two ponds, and between the November 2002 and June 2003 sampling periods. Analytical results are listed in Appendix III-A (Table III-A4 and III-A5).

4.4 PLANT TISSUE CONCENTRATIONS

To provide site-specific data regarding the potential exposure of COPECs that have been assimilated by terrestrial plants and potentially transferred to herbivorous wildlife feeding on those plants, plant tissue was collected from the Sites. A total of 24 plant tissue samples were collected from on-site areas and three samples were collected from off-site (background) areas. The sampling procedures were presented in the *Floodplain Area Field Sampling Report* (AMEC, 2003a). Plant tissue concentration results are summarized in Table III-A6.

During the process of collecting plant tissue, casual observations were made of the vegetative community to assess visually evident phytoxicological effects. While these observations were made by trained and experienced field ecologists using best professional judgment, there was no quantitative basis for the field determinations. As such, some level of uncertainty is associated with them.

Relatively few SVOCs were found in the Site-related plant samples in comparison to the off-site (background) samples. This was expected as plants generally do not take up many of the SVOCs (particularly the polycyclic aromatic hydrocarbons) from soil or they tend to metabolize them. Concentrations of pesticides and herbicides, as well as dioxin/furans were identified in plant tissue. The greatest detections in plant tissue were of inorganic constituents as metals are integral components of plant tissue (Pandas and Pandas, 1992, and Allen *et al*., 1995).

4.5 EARTHWORM TISSUE CONCENTRATIONS

To provide site-specific data regarding the potential exposure of COPECs accumulated by earthworms, and fed upon by vermivorous wildlife such as short-tailed shrews, 28-day earthworm bioaccumulation tests were conducted using soil collected from the Sites. Following completion of the bioaccumulation tests, the test earthworms were analyzed for COPEC tissue residue concentrations. Earthworm bioaccumulation tests were conducted on soil samples from 24 on-site sampling locations and the 3 off-site sampling locations. Earthworm tissue concentration results are summarized in Table III-A7.

In comparison to off-site sampling locations, a variety of organic and inorganic constituents were identified in earthworm tissue from the earthworm bioassay tests. PCBs and dioxins/furans were identified, with the highest concentrations being from Site O and Site S. The highest concentrations of herbicides and pesticides were identified from Site P, Site O and Site S. Inorganic constituents were identified on a random basis throughout the Sites.

4.6 TERRESTRIAL INVERTEBRATE TISSUE CONCENTRATIONS

In order to provide site-specific data regarding the potential exposure of COPECs accumulated by terrestrial invertebrates, and consumed by insectivorous or omnivorous wildlife, terrestrial invertebrate tissue was collected from the five disposal sites. One off-site and four composite onsite samples were collected. Actual sampling procedures are outlined in the *Floodplain Area Field Sampling Report* (AMEC, 2003a). Terrestrial invertebrate tissue concentration results are summarized in Table III-A8.

As noted in AMEC (2003a), invertebrate specimens were collected either by sweep net or by hand. The total mass of terrestrial invertebrates required could not be collected at each sample location. While the collection success was variable based on available habitat (e.g., good habitat in Site Q - poor habitat in Sites R and S), the large amount of invertebrates (i.e., 35 g) needed to satisfy laboratory requirements could not be met within the allotted sampling time. As such, invertebrate samples were composited within a single site, or in some instances, across several contiguous sites. Compositing was conducted only following concurrence with the USEPA oversight contractor. Following the compositing, there still remained some sampling areas that did not have sufficient biomass to conduct all of the required analyses. Therefore, analyses of the insect samples were prioritized in the following order: 1) dioxins/furans, 2) PCBs, 3) metals, 4) pesticides/herbicides, and 5) SVOCs. The identification of invertebrate samples is presented below.

TERRESTRIAL INVERTEBRATE SAMPLING MATRIX		
Sample Name	Composite of Sites:	Analyses
IN-Q1	Q-9, Q-10, Q-13, Q-17, Q-18, Q-19 and Q-20	dioxins/furans, SVOCs, metals, pesticides/herbicides, PCBs
IN-Q2	Q-11, Q-12, Q-14, Q-15 and Q-16	dioxins/furans, SVOCs, metals, pesticides/herbicides, PCBs
IN-OS1	Offsite areas OS-2, OS-3 and OS-4	dioxins/furans
IN-ROS1	O-1, O-2, O-3, R-1, R-2, R-3, R-4, R-5, S-1	dioxins/furans, metals, PCBs
IN-P1	P-1, P-2, P-3, P-4	dioxins/furans, metals, PCBs

The highest concentrations of dioxins/furans were identified in Q2 and ROS1. Pesticide and herbicides were also identified in those two samples. In general, SVOCs were not detected in invertebrate samples for which the analysis was run.

4.7 FOOD CHAIN MODELING EXPOSURE POINT CONCENTRATIONS

A generalized food chain model was used to estimate exposures of higher trophic level organisms to chemical concentrations in soil, surface water, sediment and prey items. Exposure to each COPEC was estimated by calculating an average daily dose (ADD) using (1) exposure media-specific concentrations, (2) estimated or measured exposure-point concentrations for prey/food, and (3) receptor-specific exposure parameters. The ADD represents the modeled amount of a chemical that an individual member of a receptor population could ingest if the individual foraged at least a portion of the time within the area used to develop the exposure-point concentrations. Inorganic and organic constituent concentrations used as input values into the food chain model included:

1. Surface soil data;
2. Surface water data from the Mississippi River and the pond;
3. Plant tissue residue data collected from the vicinity of the surface soil sampling locations;
4. Terrestrial invertebrate tissue residue data collected from the disposal sites in the vicinity of the surface soil sampling locations;
5. Earthworm tissue residue data developed as part of earthworm bioaccumulation tests; and
6. Fish tissue residue data obtained from fish collected in the pond and from fish collected in the Mississippi River by Menzie-Cura from prior investigations.

ADDs for ROIs (osprey, mink, prairie vole, short-tailed shrew and red fox) were developed based on procedures outlined in Sample *et al*. (1996) and USEPA (1993) and presented in the USEPA-approved Ecological Risk Assessment Work Plan. The total ADD is the sum of ADDs for each of the pathways (i.e., food, surface water, and sediment and/or soil), adjusted for the seasonal duration of exposure and normalized to body weight. The equations used for calculating the ADD are described in the Ecological Risk Assessment Work Plan (Appendix I-A). Appendix III-B (Tables III-B1 through III-B17) summarizes the calculations and concentrations used in the food chain modeling.

Potential ecological impacts to wildlife ROIs were assessed by comparing the calculated exposures (ADDs) to wildlife benchmarks identified from the literature. The wildlife benchmarks are TRVs that were derived from available toxicological data.

Two TRVs were derived for each chemical and wildlife ROI. One was based on the no-observed-adverse-effect-level (NOAEL) and the other was based on the lowest-observed-adverse-effect-level (LOAEL). The NOAEL corresponds to the highest dose at which no adverse effects on growth, reproduction, or survival have been observed. The LOAEL corresponds to the lowest dose at which adverse effects on growth, reproduction or survival have been observed.

The TRVs used in this BERA were developed based on discussions with the USEPA and their contractor CH2MHill, in March and April 2003. The list of TRVs used in this BERA is included as Table III-C1.

In accordance with the USEPA-approved BERA work plan, the development of exposure estimates was made for each of the terrestrial wildlife ROIs, except the red fox, on a site-by-site basis. For the red fox, the five Sites were considered in total in the determination of exposure estimates. Specific exposure parameters used in the development of the food chain models are presented in the USEPA-approved Ecological Risk Assessment Work Plan. Other assumptions used in the development of the food chain model are presented below:

1. Duplicate samples were treated as discrete samples.
2. For the food chain modeling, VOCs were omitted due to the lack of tissue available to be able to analyze for VOCs in food items (plants, worms, insects, and fish).
3. For the osprey modeling procedure, 7 SVOCs and 1 herbicide were eliminated as no appropriate avian TRV could be developed.
4. For all food chain modeling receptors, calcium, iron, magnesium, potassium and sodium were eliminated from the calculations as they are considered essential nutrients.
5. For “Total PCB” calculations, if the individual homologs were all undetected (U) for a sample, then the highest detection limit was used and given an indicator of “U” as well.

In samples with at least one detected homolog concentration, only the detected values were summed to give a total PCB value.

6. For the food chain modeling calculations, if there were at least 20 samples in a sample set, then an arithmetic average and 95% UCL value were calculated. If there were fewer than 20 samples, the arithmetic mean and maximum values were used.

7. There were some instances in which a 95% UCL could not be calculated for sample sets greater than 20. If all of the sample concentrations were equal to each other, the standard deviation was 0.0 and the UCL could not be generated. In those cases, the maximum value was substituted for the UCL.

8. For the fox food-chain modeling, it was assumed that the fox would eat equal amounts of shrews and voles so the dietary percentage of each was calculated by dividing the dietary percentage of mammals (68.8%) by two; = 34.4% voles; 34.4% shrews.

9. Surface water consumption was not used as an input parameter for the vole and shrew modeling as rodents obtain their water through ingestion of plants, rain from puddles, and dew (Vaughn, 1986)

10. Plant tissue data for 2,4-dimethylphenol were rejected; therefore, it was not included in the modeling for the prairie vole for off-site areas, as well as Areas O, P, R and S.

11. Modeling for the short-tailed shrew or the red fox did not include 2,4-dimethylphenol because the analytical results from the terrestrial invertebrate tissue data were rejected for this chemical. Because the shrew did not have a calculated average daily dose (ADD) for 2,4-dimethylphenol, it could not be carried over to the fox model.

12. To calculate the concentration of a compound within the prairie vole for use in the fox modeling equations, the corresponding plant concentrations were multiplied by a plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). (Note: the BCF for 2,3,7,8-TCDD was used for the TEQ calculation). For those compounds lacking a BCF, the vole's average daily dose (ADD) was used instead.

13. The concentrations of compounds within the shrew for use in the fox modeling equations were equal to the shrew's ADD. According to Sample and Suter (1994), if contaminant concentrations are only available for abiotic media then uptake factors should be used that describe the relationship between the contaminant concentration in soil or water and that in biota. Because there are no existing invertebrate-to-shrew uptake factors

available, it was decided to simply use the average daily dose for the shrew as equal to its contaminant load. In most cases (if not all) this would lead to an overestimation in the risks to the shrew as soil-to-short tailed shrew uptake factors for many of the constituents are all well below 1 (USEPA, 1999a).

14. For the mink and fox modeling, the background locations (upstream for mink, off-site for fox) were given a percentage of ingested pond water (mink and fox) and/or pond fish (mink) of 0.0%. This is because the pond is considered an on-site hazard and it was not considered appropriate to include in the background modeling evaluations.

15. For the mink and the fox modeling, only the river surface water values closest to the shore (50 feet from the bank) were used in the calculations because, theoretically, this was the only water accessible to these animals. For the mink and the fox modeling, as the surface water samples from the 50-foot transect line were not analyzed for dioxins/furans, samples from the 150-foot transect were used.

16. For the mink and osprey modeling, the river fish samples that were used as input parameters (Menzie-Cura, 2001) were not analyzed for metals. Fish tissue concentrations for metals were developed by multiplying the surface water metals data by a surface water-to-fish bioconcentration factor (BCF). If a BCF was not available for a particular metal, the average of the available inorganic BCFs was used as per USEPA, (1999b). This is a very conservative approach to estimating body burdens of metals in fish. In general, metals did not exceed their ambient water quality criteria; however with certain metals, such as mercury, the calculated uptake of metals resulted in the estimation of potential risks.

17. Individual dioxin/furan congener sample concentrations were multiplied by their appropriate TEFs for fish (pond fish, pond surface water and pond sediment HQs), birds (osprey modeling) or mammals (surface soil HQs; vole, shrew, fox and mink modeling). In order to calculate TEQs, all dioxin/furan concentrations were multiplied by their TEF then added together to obtain the TEQ. TEFs are summarized in Table III-C2.

18. As the mink and osprey are wide-ranging organisms that feed on prey that also are wide ranging (fish), estimated body burdens were calculated using average COPEC concentrations for input parameters. Likewise, red fox prey species estimated body burdens were calculated using average COPEC concentrations as this animal is also likely to forage over a large area. Additionally, the discontinuity of the Sites makes it

highly unlikely that a red fox would travel from site to site to forage (*e.g.* Site P is separated from Site Q by industrial areas characterized by buildings, pavement and debris areas). Instead, the red fox would most likely move from disposal sites to neighboring undeveloped areas. As such, the average concentration is most reasonable for this organism.

19. Contaminants with HQs ≥1.0 for all of the floodplain ecological receptor endpoints were eliminated as final COPECs if all exposure media and prey source input concentrations to the model were based on ½ the detection limit for maximum concentrations. In addition, for average or 95% UCL concentration model calculations, a COPEC was eliminated if all of the input concentrations to the model were based on averages or 95% UCLs that were calculated from all non-detected concentrations. Therefore, final COPECS were based on an HQ ≥ 1.0 and above their associated background HQ, with at least one input parameter based on a detected concentration.

As discussed in Sections 4.4 through 4.6, plant tissues and terrestrial invertebrates were collected from the Area 2 Sites for analysis of tissue body burdens to provide further input into the food chain modeling. Using soil collected from the Area 2 Sites, earthworm bioaccumulation tests were conducted and resulting tissue body burdens were determined through laboratory analysis of the worms (Section 4.5). Data regarding the concentrations of inorganic and organic COPECs identified in the plant tissue was only used as a component of the food chain modeling for the prairie vole, which was carried through to the red fox modeling. Data regarding the concentrations of inorganic and organic COPECs identified in the earthworm tissue were only used as a component of the food chain modeling for the short-tailed shrew. Data regarding the concentrations of inorganic and organic COPECs identified in the invertebrate tissue were only used as a component of the food chain modeling for the short-tailed shrew. Food chain modeling information from the prairie vole and the short-tailed shrew was then used in the food chain modeling for the red fox.

4.8 EXPOSURE POINT CONCENTRATION (EPC) DEVELOPMENT

For the terrestrial ecosystem (surface soil, plant tissue, terrestrial invertebrate tissue, and earthworm tissue) and aquatic ecosystem within the floodplain, a maximum and 95% UCL (if possible) and an arithmetic average concentration were calculated for each analyte found at

each one of the disposal sites. These values were utilized in the determination of risks to vermivorous wildlife (short-tailed shrew) and herbivorous wildlife (prairie vole). For the more wide-ranging species (mink, osprey, and red fox), average concentrations calculated from site-wide data were utilized for the risk calculations because, it is very likely that species that forage over a wide area would be exposed to a range of concentrations and the average calculation is the most appropriate exposure scenario for these organisms. As per the USEPA-approved work plan, no initial screening of the analytes was conducted.

5.0 AQUATIC ECOLOGICAL EFFECTS ASSESSMENT

The effects characterization is a qualitative and/or quantitative description of the relationship between the concentrations or dose of a COPEC and the nature of possible adverse effects elicited in exposed receptors, populations, and/or ecological communities. The results of the aquatic effects assessment and the aquatic exposure assessment (Section 3.0) are combined to characterize the risks to ROIs posed by COPECs in Section 7.0.

5.1 AQUATIC ECOTOXICOLOGICAL BENCHMARKS

Several of the measurement endpoints are associated with the comparison of Site-related data to ecotoxicological benchmarks for various media. The measurement endpoints are used in the evaluation of the potential for ecological risks to receptors in the Mississippi River adjoining the Sites. These benchmarks are risk-based screening concentrations that were used to evaluate the concentrations of chemicals detected in sediments and surface water in the Mississippi River. They are species- and chemical-specific values, and they typically represent chemical concentrations in a matrix below which, adverse effects will not likely occur.

However, the benchmarks were not developed to serve as reference levels that will trigger specific remedial actions. The exceedance of a benchmark is not confirmation that an ecological impact is occurring. Rather, the benchmarks are primarily intended to help focus and prioritize project objectives and data requirements during the planning and implementing of site-specific investigations by identifying constituents and particular areas of sites that may pose potential risks to aquatic and terrestrial ecological receptors.

5.1.1 SEDIMENT BENCHMARKS

For freshwater sediment screening, several benchmark values were available in the literature (Blanchet *et al*., 2001). The benchmarks chosen for this report follow the hierarchical approach outlined in the Ecological Risk Assessment Work Plan (Appendix I-A). These benchmarks are summarized in Tables 5-1, 5-2 and 5-3. The benchmarks that were used in the BERA are presented below.

- Ontario Lowest Effect Level (LEL) and Severe Effects Level (SEL): Concentrations of COPECs were first compared against Ontario LEL and SEL values prepared by the Ontario Ministry of the Environment (Persaud *et al*., 1993). When both LEL and SEL values were available, constituent concentrations that exceeded the lower screening criteria (LEL) were retained as COPECs.

  The SEL values for non-polar organics (SVOCs, PCBs, pesticides) were normalized to TOC content of the sediment (Persaud *et al*., 1993). The average TOC content of all sediment samples from the Site was calculated at 5922 milligrams per kilogram (mg/kg). SEL values for all nonpolar organic compounds were calculated by multiplying SEL values (Persaud *et al*., 1993) by the fraction organic carbon (f_{oc} = 0.0059).

  No screening values were available for PCB homologs. Hence, individual homologs were added to calculate Sum-PCBs at each location as described in Section 3.1.7, and the maximum of Sum-PCBs was compared against LEL and SEL values for total PCBs.

- Threshold Effect Level (TEL) and Probable Effect Level (PEL): If Ontario Sediment Quality Guidelines (SQGs) were not available for a particular compound then TEL and PEL values were used. TELs are concentrations below which adverse effects are not expected to occur on sediment dwelling organisms, and PELs are concentrations above which adverse effects are expected to occur in sediment dwelling organisms frequently (MacDonald *et al.,* 2000).

  Of those compounds that did not have LEL/SEL values, only two compounds [bis(2-ethylhexyl)phthalate and 2,3,7,8-TCDD] had TEL/PEL values. The TEL/PEL values for bis(2-ethylhexyl)phthalate are from USEPA (1997c) and the TEL/PEL values for 2,3,7,8-TCDD (TEQ) are from Smith *et al.* (1996). TCDD TEQ concentration at the Site was calculated as described in Section 3.1.7. The TEL benchmarks were lower than PEL values, and constituent concentrations were screened against TELs.

- Other Benchmarks/Screening Values: None of the above benchmarks were available for the following compounds; therefore, other screening numbers (not listed in the work plan) were calculated or were adapted from the literature as described below:

Benzo(b)fluoranthene: The toxicity of this compound was assumed to be the same as that of benzo(k)fluoranthene, and LEL and SEL values for benzo(k)fluoranthene were used.

Endrin Aldehyde, Endrin Ketone: No screening values were available for these two compounds; benchmarks (LEL/SEL) for Endrin were used for these two compounds on the assumption that the ecotoxicological effects and behavior of the three compounds are similar.

Pentachlorophenol, 1,4-Dichlorobenzene: The Washington No Effects Level (Washington DEP, 2003) was used for screening.

Aluminum: USEPA ARCS (Assessment and Remediation of Contaminated Sediments) values (USEPA, 1996; Jones *et al*., 1997) [Probable Effects Concentration (PEC) and No Effect Concentration (NEC)] were used.

Barium: The Apparent Effects Threshold (AET) value was used as a benchmark for barium.

Styrene: For styrene, a benchmark value was calculated using the equilibrium partitioning approach. The equilibrium partitioning approach is applicable to nonionic organic chemicals with log K_{ow} values from 2.0 to 5.5 (USEPA, 1997c). The sediment quality benchmark (SQB) was calculated using the following approach (Jones *et al*., 1997):

$$SQB = f_{oc} \times K_{oc} \times WQB$$

Where,

f_{oc} is the site-specific fraction organic carbon (0.0059)

K_{oc} is the partition constant of the chemical to organic carbon, (values adopted from Risk Assessment Information System (RAIS) database); and

WQB is the water quality benchmark

For styrene, a K_{oc} value of 517.8 L/Kg, and Illinois chronic aquatic toxicity criterion of 8 *u*g/L were used to derive a SQB of 611 *u*g/kg.

Beryllium: The EqP concept was applied for beryllium by substituting solid-water partitioning constant (K_d) for K_{oc} ($K_d = K_{oc} \times f_{oc}$). A Tier II SCV of 5.09 *u*g/L (Suter and Tsao, 1996) was used as the water quality benchmark. Using a K_d value of 790 L/kg (RAIS Database) and a WQB of 5.09 *u*g/L, a SQB value of 4.02 mg/kg was calculated and was used for screening.

Methoxychlor, Xylenes, Toluene, Ethylbenzene, Chlorobenzene, Benzene, Acetone, 2-Butanone (methyl ethyl ketone (MEK)), 1,2-Dichlorobenzene: Jones *et al.*, Secondary Chronic Value (SCV).

2,4-D: The Dutch sediment screening value of 35 ug/kg was used for screening.

Para-Chloroaniline: The Dutch sediment screening value 0.04 mg/kg per compound for monochloroanilines was used for screening purposes.

- Other Chemicals: For the following compounds no screening values were available and SQBs could not be calculated using the EqP approach. These compounds were retained as COPECs.
    - *Dalapon*: This compound has a low K_{ow} value (1.68)
    - *Dichloroprop*: No benchmarks are available
    - *Vanadium*: No benchmarks are available.
    - *Calcium, Magnesium, Potassium, Sodium*: Essential nutrients – No benchmarks available.

5.1.2 SURFACE WATER BENCHMARKS

For freshwater screening, the benchmarks chosen for this report follow the hierarchical approach outlined in the Ecological Risk Assessment Work Plan (Appendix I-A). These benchmarks are summarized in Tables 5-4, 5-5 and 5-6. The benchmarks that were used in the BERA are presented below.

- National Ambient Water Quality Criteria (NAWQC): Surface water COPECs were first screened against acute and chronic National Ambient Water Quality Criteria (NAWQC) (USEPA, 2002). When both acute and chronic values were available, the chronic value (which is also the lower value) was used for screening.

  NAWQC for some metals are functions of water hardness. Therefore, acute and chronic criteria for these metals (copper, lead, and zinc) were calculated using the site-specific (Site-average) hardness value of 232 mg/L (as $CaCO_3$). For arsenic, copper, zinc, lead, and mercury, the chronic and acute criteria for total metals were derived from dissolved fraction criteria using appropriate conversion factors specified in the NAWQC document (Table 5-7).

- Illinois Aquatic Life Criteria: If an NAWQC was not available for a chemical, then the surface water compound concentrations were screened against Illinois Aquatic Life Criteria (Illinois EPA, 2003). When both Acute Aquatic Toxicity Criteria (AATC) and Chronic Aquatic Toxicity Criteria (CATC) were available, the chronic value (which is also the lower value) was used for screening.

- Tier II Secondary Values: If NAWQC or Illinois Aquatic Life Criteria were not available for a chemical, then acute and chronic Tier II Secondary Values (SVs) assembled by Suter and Tsao (1996) were used for screening purposes. Chronic values were used for screening purposes.

- Lowest Chronic Value (LCV): If Federal (NAWQC), State (IL Aquatic Life Criteria), or Tier II SVs were not available, then the Lowest Chronic Value (LCV) for all organisms developed by the Oak Ridge National Laboratory (Suter and Tsao, 1996) was used. LCVs compiled by Suter and Tsao (1996) were used for calcium, magnesium, potassium and sodium.

5.2 FISH TISSUE EFFECTS DETERMINATION

Potential for adverse effects on Site fish is evaluated by comparing concentrations of COPECs in fish tissue to body burden-based TRVs that have been reported to cause adverse effects in similar organisms. Maximum concentrations of COPECs in fish tissue from the Site were compared to No-Effect TRVs reported in the literature.

For the COPECs identified in fish tissue (Table 5-8), body burden-based TRVs were compiled primarily from two sources: the database compiled by USEPA (Jarvinen and Ankley, 1999), and the *Environmental Residue Effects Database (ERED)* (USACOE, 2002). These databases are compilations of data, taken from the literature, where biological effects and tissue contaminant concentrations were simultaneously measured in the same organism.

Both databases have information for various freshwater and saltwater species of fish and invertebrates. Only freshwater species were selected to develop the body burden-based TRVs. To the extent possible, only those fish species that are found in the Site area were selected. If none of the known site species were available, other closely related species found in streams and rivers were selected (for example, fathead minnows, which may not occur at the Site, might represent all warm water fish on a site – USEPA, 1994). Generally, body burden-based TRVs were available for several different life stages (e.g., adult, juvenile), exposure routes (e.g., ingestion, absorption), biological effects (e.g., growth, mortality), endpoints (e.g., LOED, NOED, LC_{50}), and fish tissues (e.g., whole body). When multiple data were available for a COPEC, data that closely matched the fish that were sampled and measurement endpoint (e.g., adult life stage, growth/reproduction/mortality effects, whole body analysis) were selected.

When data were available for multiple endpoints, the chronic No Observed Adverse Effect Level (NOAEL) and Lowest Observed Adverse Effect Level (LOAEL) were preferred over LD_{50} (Lethal Dose, 50% mortality) values. All body burden-based TRV benchmark values were converted to the equivalent of a NOAEL. If multiple endpoints were used, a LOAEL was converted to a NOAEL by multiplying by a safety factor of 0.1 and LD_{50} values were converted to NOAELs by multiplying by a safety factor 0.01 (factor of 0.1 for LD_{50} to LOAEL and another factor of 0.1 for LOAEL to NOAEL). Then the geometric mean of all the endpoints was calculated and used as the TRV for that COPEC. The data used for deriving the body burden-based TRV values are summarized in Appendix II-I.

For several compounds that did not have body burden-based TRVs, data for structurally similar compounds were used as surrogates: 3-methylphenol was used as a surrogate for 2-methylphenol (only trout fish data was available for 4-methylphenol and hence not used); beta-BHC was used as a surrogate for alpha-BHC; chlordane was used as a surrogate for gamma-

and alpha-chlordane; endosulfan was used as a surrogate for endosulfan I; and endrin was used as a surrogate for endrin aldehyde.

2,4-Dichlorophenol is an ionic compound and its toxicity values are a function of the pH of the water. Toxicity data are available for experimental pH values of 6, 8, and 10. The average pH of surface water at the Site is 7.93 (Table 3-3); therefore, TRV data for pH 8 were used. For dioxin/furan compounds, TRVs were compiled for 2,3,7,8-TCDD (for comparison to TEQ) as well as for individual congeners.

For three herbicide compounds [2,4,5-T, 2,4,5-TP (Silvex), and MCPP)], no TRV values were available. For these compounds, TRVs were derived from toxicity data available on USEPA ECOTOX database (http://www.epa.gov/ecotox). The ECOTOX database provides chemical toxicity information for aquatic and terrestrial life. For fish species that represent the habitat at the Site, concentrations of a particular chemical in test solutions (mg/L) that resulted in 50% mortality (LC_{50}) of test organisms after 24 to 96 hours of exposure were used. These toxicity values were converted to fish residue values by multiplying with an appropriate bioaccumulation factor (3.2 L/kg for all three compounds, taken from RAIS database). When multiple results were available, the geometric mean of the results was taken and multiplied with an appropriate uncertainty factor (0.01 to convert from LC_{50} to NOAEL as described earlier) to arrive at final body burden-based TRVs. The final body burden-based TRV benchmarks used for screening COPECs are summarized in Table 5-8.

6.0 FLOODPLAIN ECOLOGICAL EFFECTS ASSESSMENT

As with the Aquatic Ecological Assessment, the determination of the possibility of adverse impacts occurring for several of the measurement endpoints was made by the comparison of Site-related data to ecotoxicological benchmarks for various media. These benchmarks were risk-based screening concentrations that were used to evaluate the concentrations of chemicals detected in surface soil, surface water and sediment in terrestrial/aquatic areas of interest at, and adjacent to, the Site. They are species- and chemical-specific values, and typically represent chemical concentrations in a matrix below which adverse effects will not likely occur.

This BERA utilized surface soil screening, surface water and sediment benchmarks identified in the Ecological Risk Assessment Work Plan (Appendix I-A).

6.1 SURFACE SOIL PHYTOTOXICITY BENCHMARKS

To determine if the chemical concentrations in surface soils were toxic to the plant community, detected concentrations of COPECs in surface soil from each of the disposal areas were compared to phytotoxicity benchmarks identified in the literature. The soil benchmarks are based on data provided by toxicity studies in the field, or more commonly in greenhouse and growth chamber settings. These studies evaluated the effects of chemicals on various trees, wildflowers, grasses, and vegetable species.

A hierarchical approach to identifying soil benchmarks for screening potential constituents of concern in soils was used. The benchmarks in order of their evaluation are as follows:

- ONRL vegetative benchmarks (Efromyson *et al*., 1997a);
- ORNL soil invertebrate benchmarks (Efromyson *et al*., 1997b) (earthworm toxicity values);
- USEPA Region IV Recommended Ecological Screening Levels for Soil (USEPA, 2001);
- Canadian Soil Screening Values (British Columbia Regulation 375/96, 1997);
- Canadian Environmental Quality Guidelines, 2002
- NOAA Screening Quick Reference Tables, 1999

6.2 WILDLIFE BENCHMARKS

Potential ecological impacts to wildlife ROIs were assessed by comparing exposures to ROIs to wildlife benchmarks identified from the literature. These screening benchmarks are identified as TRVs.

For each chemical and wildlife ROI, TRVs were derived to represent both a chronic NOAEL and a chronic LOAEL. The NOAEL corresponds to the greatest exposure associated with no observed adverse effects on growth, reproduction, or survival. Exceedance of these values can be considered as potential impacts to sensitive individuals within the community. The LOAEL corresponds to the smallest exposure associated with observed adverse effects on growth, reproduction or survival. Exceedance of an LOAEL can be considered as a potential impact to the community as a whole. The TRVs utilized in this BERA are presented in Appendix III-C (Table III-C1)

6.3 POND SURFACE WATER AND SEDIMENT BENCHMARKS

The benchmarks used for screening of the pond sediment are defined in Section 5.1.1. The benchmarks used in the screening of the pond surface water are defined in Section 5.1.2. Because the ponds are ephemeral in nature, only the acute surface water and sediment values were used in evaluating these matrices. The use of chronic values implies that a long-term exposure may result to fish, amphibians, benthic organisms, or other aquatic receptors. However, the most significant long-term impact to the ponds is desiccation. Therefore, the BERA examined the potential for short-term or acute exposure to potential aquatic receptors.

The BERA did not evaluate the potential for food chain impacts to amphibians as the amphibian was not selected as an ROI for evaluation. The selection of ROIs was based on detailed discussions with representative of USEPA and its contractor, CH2MHill. Beginning in late 2000, a series of project meetings were held with USEPA, IEPA, U.S. Fish and Wildlife and other agencies to discuss the scope of the ecological risk assessment for the Sites. The discussion culminated in the identification of the receptors, which were first proposed in the Ecological Risk Assessment Work Plan (Appendix I-A). Following comments provided by USEPA and its

contractor, as well as other agencies on the Draft SSP, the Final SSP, which identified the ROIs used in this BERA, was submitted to the USEPA and approved.

6.4 COPECs IN POND FISH TISSUE EFFECTS EVALUATION

Fish tissue collected from the large pond was analyzed and the data evaluated in the same manner as noted in Section 3.1.5 and Section 3.2.5. Effects determination of the risks posed by the presence of COPECs in fish tissue was made by a comparison to the same TRVs noted in Section 5.2. It is noted that the fish community present within the large pond in November 2002 no longer exists as the pond has evaporated, killing the fish once present there.

7.0 RISK CHARACTERIZATION

Risk characterization combines exposures to COPECs associated with the Area 2 Sites and ecotoxicological effects benchmarks to estimate the potential for ecological risks. Procedurally, the risk characterization is performed for each measurement endpoint by (1) screening all measured COPECs against toxicological benchmarks and reference concentrations (2) where possible, estimating the potential effects of the COPECs identified at the Sites using biological data; (3) where possible, evaluating the bioassay data; (4) logically integrating endpoints in a weight of evidence approach to characterize risks, and (5) listing and discussing the uncertainties in the assessment. The Ecological Risk Assessment Work Plan (Appendix I-A) details the procedures used in this BERA.

Concentrations of COPECs in exposure media (sediments, surface water or surface soil) or in calculated or measured body burdens were evaluated by the mathematical comparison of a constituent concentration to an ecotoxicological benchmark. Risk characterization of the potential for impacts to upper trophic level organisms was conducted in the same manner, with the ADD being divided by the TRV for the development of a hazard quotient (HQ). HQs are calculated using the following equation:

$$HQ = \frac{\text{Media-Specific Constituent Concentration or Total Estimate of Exposure}}{\text{Ecotoxicological Benchmark (in comparable units)}}$$

If the HQ is less than 1.0, then it is concluded that the risks to ecological receptors are negligible. If the HQ is equal to, or greater than 1.0, then it is concluded that a *potential* for impacts to ecological receptors exists. An HQ equal to or greater than 1.0 is not confirmation of ecological effect, only an indication that risks are present and the need to examine other lines of evidence for confirmation. The magnitude of the exceedance over 1.0 may be related to the magnitude of the potential for impact. The level of conservatism in the benchmark, however, must be taken into consideration. Comparison of chemical data to overly conservative benchmarks may exaggerate the ecological risks.

Aquatic and terrestrial HQs were derived as follows:

- For the aquatic risk assessment, HQs were conservatively estimated using the maximum concentration (HQ_{max}) of the COPECs or the 95 percent upper confidence limit (UCL) of the arithmetic mean in a given medium, based on the Land H-statistic (EPA, 2002b). The maximum and 95% UCL concentrations for all sediment and surface water analytes from the Mississippi River are presented in Appendices II-J and II-K, respectively. The HQs for the sediment COPECs are summarized in Tables 7-1, 7-2 and 7-3. The HQs for surface water COPECs are summarized in Tables 7-5 and 7-6.

- For the floodplain risk assessment, HQs were calculated for vermivorous wildlife (short-tailed shrew) and herbivorous wildlife (prairie vole) using the maximum, or 95% UCL, and average concentrations for each identified constituent detected in the surface soil of each of the disposal areas. For the more wide-ranging species (mink, osprey, and red fox), HQs were calculated using average concentrations calculated from the data from all of the Sites.

Although the Work Plan states that EPCs for wildlife receptors are best expressed as average COPEC concentrations in prey, surface water, and sediment or soil within the receptors' foraging area, a different approach was used for the aquatic assessment since it focuses more on benchmark comparison (as opposed to dose calculations) where an upper estimate of the mean may be more appropriate for conservatism.

7.1 RISK CHARACTERIZATION OF AQUATIC RECEPTORS IN THE MISSISSIPPI RIVER

There were generally no ecological risks associated with site-related sediments. However, minimal risks were noted with sediments from the sampling location just downstream of Site R. For surface water, the only significant ecological risks were also associated with the sampling locations found just downstream of Site R. An evaluation of both surface water and sediment samples indicated that, while some constituents were removed from further evaluation in the BERA due to a low frequency of detection (< 5% of all samples), none of those constituents exceeded their respective background values (if available) by a significant degree. Specifically, the sediment COPECs that were removed were, at maximum, 14 times higher than their

associated background values. The majority of these were below one order of magnitude greater than their reference value. For surface water, all constituents removed from further evaluation were at or below one order of magnitude greater than their reference concentration.

Using the initial screening process outlined in Section 3.2, preliminary COPECs were identified and carried through the full risk screening process. Analytes were retained as COPECs in sediments following the initial evaluation are listed in Tables 7-1, 7-2 and 7-3.

Tables 7.4, 7.5 and 7.6 list the analytes that were retained as COPECs in surface water.

7.1.1 Evaluation of Chemical Data from Sediments (Measurement Endpoint 1.a)

The ability of the benthic community to perform its role as a prey base for fish was evaluated by comparing maximum concentrations of COPECs in sediments to conservative sediment quality benchmarks as described in Section 5.1.1. An HQ was calculated for each of the sediment COPECs. Sediment was collected from all six Mississippi River locations (R1 through R6) in 2002. Because the groundwater barrier wall was installed in 2003, sediment was also collected from the PDA/R3 locations in 2005 and 2007. The results are summarized, by year, in Tables 7-1, 7-2 and 7-3. The distribution of COPECs through the sampling areas is shown, by year, in Tables 7-7, 7-8 and 7-9. Benchmark values were not available and therefore HQs were not calculated for dalapon, dichloroprop, calcium, magnesium, potassium and vanadium.

The COPECs that had an HQ$\geq$1 when the maximum concentrations at the Site were compared to the sediment quality benchmarks are listed in Tables 7-1, 7-2 and 7-3. For these COPECs, many of the benchmark exceedances were based on non-detect values for which a maximum value was calculated as half the detection limit. Measured COPEC concentrations in sediment are listed in Tables 7-7, 7-8 and 7-9.

For these contaminants, HQs were also calculated using the 95th UCL concentration. The analytes having $HQ_{95UCL} \geq 1$ are listed in Tables 7-7, 7-8 and 7-9. The 95% UCL calculations included the ½ detection limit for results that were non-detects.

Some general patterns were noted in the distribution of the sediment COPECs. The highest levels of VOCs, SVOCs, pesticides and herbicides were present in the PDA and R3 sampling areas (adjacent to and just downstream of Site R), with the highest positive results seen along transects located 50 feet and 150 feet from the river bank in both 2002 and 2007 . While the inorganic COPECs were identified with maximum concentrations producing HQs greater than 1.0, none of the HQs were greater than 10, indicating that the concentrations are not likely to produce significant ecological impacts. These concentrations are also within the range of concentrations typical to area sediments. This is supported by the sediment toxicity test results discussed in Section 7.1.2.

The following is a summation by chemical classification of the distribution of COPECs identified in river sediments.

VOCs/SVOCs: In the 2002 sediment samples, concentrations of 1,2-dichlorobenzene (HQ=1.7), chlorobenzene (HQ=45) and p-chloroaniline (HQ=75) were above benchmark values in the R3 area just downstream of Site R. None of the other sediment sampling locations yielded detectable concentrations above benchmark vales for these compounds.

In 2005, sediment samples were collected only at the PDA and R3 areas adjacent to and slightly downstream of Site R. These samples were collected after the 2003 installation of the groundwater barrier wall. Concentrations of 1,4-dichlorobenzene (HQ=21) and chlorobenzene (HQ=1.9) were still above benchmark values.

In 2007, sediment samples were collected only in the PDA area adjacent to Site R. Concentrations of 1,4-dichlorobenzene (HQ=39), chlorobenzene (HQ=79), toluene (HQ=6.8), p-chloroaniline (HQ=48) and acenaphthene (HQ=2.0) were above benchmark values.

Acetone was detected at most Site areas and at all but one reference location in the 2002 sediment samples. All detected acetone data results were qualified “J” (estimated value). Concentrations of acetone exceeded benchmark values at the Reference Area (HQ_{max} = 19) as well as at the Site (HQ_{max} = 57). Note that acetone data was qualified by the data validators, and acetone is a common laboratory artifact. Acetone was not detected above the benchmark value in any sediment samples from 2005 and only significantly in one sample from 2007.

Pesticides/Herbicides: In the 2002 sediment samples, five pesticides exceeded sediment quality benchmarks. However, of those five, only dieldrin (HQ=1.5), endrin aldehyde (HQ=1.4), and hepatachlor epoxide (HQ=2.2) were based on actual detected concentrations. The other two exceedances were not based on detected concentrations, but were higher than the benchmark based on ½ the detection limit.

In the 2005 sediment samples, 4,4'-DDD (HQ=4.6) was the only pesticides to exceed its benchmark, but it was based on a non-detected concentration. When the maximum detected concentration was compared to the benchmark, the HQ was less than 1.0 (HQ=0.81).

In the 2007 sediment samples, 4,4'-DDD (HQ=1.1) was the only pesticide to exceed its benchmark.

Metals: In the 2002 sediments, maximum concentrations of eight metals exceeded benchmark values, but HQs were all less than 10 indicating the potential for impacts to benthic invertebrate communities was slight. HQs of barium, cadmium and manganese were also $\geq$1.0 in reference area sediments, but lower than in Site-related areas.

In the 2005 sediments, seven metals exceeded benchmarks. In the 2007 sediments, five metals were equal to or exceeded benchmarks, but all HQs for both sampling periods were less than 5.0, and most were very similar to the metals concentrations in the Reference Area sediments.

Vanadium, for which no screening values were available, appears to be derived from natural sources. The average "background" concentration for vanadium in freshwater sediments is 50 mg/kg (NOAA, 2002), and all Site concentrations were less than this value.

Benchmark values for calcium, magnesium, potassium, and sodium were not available. However, these constituents are considered to be essential nutrients and are of no ecological concern.

All of the sediment metals numbers were below or just slightly above benchmark values. Site-related sediment samples had metals concentrations that were very similar to those in the

Reference Area sediment samples. Sediment metals do not appear to be a risk driver at the Sites. Sediment metals data appear to be typical of Mississippi River sediments (Boyer, 1984).

7.1.2 EVALUATION OF SEDIMENT TOXICITY TESTING (MEASUREMENT ENDPOINT 1.b)

The results of the sediment bioassays indicated that there were no significant toxic effects in any of the Site-related sediment samples. The Dunnett's one-way ANOVA assessment of *H. azteca* survival demonstrated that there was no significant difference in mean survival when samples from Site areas R2, R3, R4, R5, and R6 were compared to laboratory control samples. A statistically significant different mean survival of 90% was observed at R1BM1S (reference area) compared to the mean control survival for R1, which was 100%.

Similarly, the Dunnett's one-way ANOVA assessment of mean *C. tentans* growth demonstrated that none of the sediment samples collected from plots R1, R2, R3, R4, R5 of R6 exhibited mean growth that was significantly lower than the mean growth of the corresponding laboratory control samples at an alpha of 0.05.

A statistical summary of the sediment bioassay results is presented in Table 7-13.

7.1.3 EVALUATION OF BIOACCUMULATION TESTING

While not included as a measurement endpoint, the bioaccumulation tests were used to qualitatively demonstrate the bioavailability of COPECs in sediments (Appendix II-L). Concentrations and distribution of remaining constituents of concern are discussed below.

SVOCs: Three SVOCs were detected in a small number of clams exposed to Site sediments. indeno(1,2,3-cd)pyrene and pentachlorophenol were detected in just one clam sample (R5CM1S) and bis(2-ethylhexyl)phthalate was detected in three samples (detected at 8.1% frequency). All three SVOCs were detected in the associated sediments, but at concentrations below sediment quality benchmarks.

Pesticides/Herbicides: Dichloroprop was the only pesticide with a higher concentration (two-fold) in Site-related sediments than in Reference Area sediments.

PCBs: No PCB homologs were detected in any of the clams exposed to Site sediment.

Dioxins: A single dioxin congener, octachlorodibenzo-p-dioxin (OCDD) was detected in clams exposed to Site sediments and reference area sediments. The maximum biota concentration (45 *u*g/kg) was reported for clams exposed to sediments from the R4AD location, although this congener was not detected in sediments at this location.

Metals: Maximum concentrations of three metals (chromium, lead, and nickel) in Site biota were higher (> 2X) than the maximum concentrations in the reference biota. The maximum clam concentrations for all three of these metals were from sediments collected from the R4AM location, although the sediment concentrations at this location were similar to other locations.

In comparing the COPECs that were identified in the clams to the COPECs identified in the fish tissue work, only four organic COPECs (4,4'-DDE; 4,4'-DDT; 2,4,5-T; and MCPP) were found both. Of these four COPECs, all of the concentrations identified in the clams were below the USACOE *ERED* values for those constituents. Metals were not analyzed in the fish collected by Menzie-Cura.

7.1.4 EVALUATION OF BENTHIC INVERTEBRATE COMMUNITY ASSESSMENT

Exposure of benthic macroinvertebrates to COPECs in sediments could result in reduced abundance, diversity, or biomass of these organisms. This reduction in prey base could then affect the fish population, particularly the bottom feeders. Effects are evaluated by comparing the composition and abundance of benthic macroinvertebrates within the Site to data from the Reference area.

Benthic community diversity and abundance was evaluated at only two locations – one at the Site area (R6AD) and another at the Reference area (R1BD). In the Site area, a total of 66 organisms belonging to 8 different taxa were identified. In the Reference area, a total of 25 organisms belonging to 6 different taxa were identified.

In addition to the data collected in this study, results of the benthic study in the Krummrich report (Menzie-Cura, 2001) were also evaluated. In this study, benthic samples were collected

from several locations adjacent to the Site (in the area between R2 and R3) and reference areas. The evaluation of the benthic community was confounded by the high-energy environment (strong currents and coarse grain sediments) present at the Site; therefore, Menzie-Cura considered these results to be inconclusive. They found a sparse benthic community at the Site and upstream reference area. Because of the nature of the environment, it was hypothesized that the benthic community is not a significant component of the fish prey base, and plankton, drift, and periphyton were likely to be more important component of the prey base. The results and conclusions drawn by Menzie-Cura were similar to those drawn by AMEC. However, AMEC did identify a slightly larger benthic community than that noted by Menzie-Cura, which is probably a function of the sample locations. Table 7-14 summarizes the results of the benthic evaluation.

7.1.5 Evaluation of Chemical Data in Surface Water (Measurement Endpoint 1.c)

For the surface water samples collected from the Mississippi River in 2002, the only organic COPECs that exceeded benchmarks were p-chloroaniline (HQ=800) and 2,4-D (HQ=3.6). Both of these exceedances were in the same sample collected at Location R3AU1W, in the river, closest to the bank, just downstream of Site R. Water samples from this location also caused mortality in the *C. dubia* toxicity test.

For surface water collected in 2005 and 2007 (post-installation of the groundwater barrier wall), no organics COPECs exceeded water quality benchmarks.

Concentrations of metals in surface water were similar between the three sampling periods and between the Site areas and the Reference area. In addition, concentrations of several metals were much higher in "total" analysis than in dissolved fraction, indicating that they were associated with suspended solids in the water column; therefore, no significant risks are expected from the presence of these metals in surface water to fish populations. Surface water HQs are summarized in Tables 7-4, 7-5 and 7-6.

The highest exceedance of a benchmark in metals for the three sampling events was for total aluminum in 2005 (HQ=44). However, dissolved aluminum was not detected in any sample from that year. This indicates that aluminum was associated with suspended solids from the

river. Total barium (HQ=30) and dissolved barium (HQ=19) both exceeded the benchmark in 2005, but a significant proportion of the barium was associated with suspended solids from the river.

In 2007, the only metal exceeding the benchmark value was dissolved barium (HQ=17). However, this value was comparable to the Reference area exceedance (HQ=13). Therefore, the installation of the groundwater barrier wall has succeeded in reducing the concentrations of metals and no significant risks are expected from the presence of metals in surface water adjacent to the Site.

7.1.6 EVALUATION OF SURFACE WATER TOXICITY TESTING (MEASUREMENT ENDPOINT 1.d)

As described in Section 3.2.4, surface water bioassays were conducted and the results indicated that there were significant toxic effects at only a limited number of sampling locations. The mean survival and growth rates for *P. promelas* from all Site samples were not different from their respective laboratory control samples (Table 7-15).

For the *C. dubia* survival analysis, however, five samples had mean 7-day survival rates lower than the control samples. The 7-day survival rates were as follows for samples R3AU1W (0%), R4AM1W (66.7%), R4AD1W (70%), R5AD1W (70%), and R6AM1W (70%). The mean 7-day survival rate for the pooled control samples was 96%. The R3AU1W sample was the only sample shown to be acutely toxic to *C. dubia* (i0% survival at 48-hours). The toxicity observed in R6AM1W is not conclusive because the survival of the *C. dubia* was not affected in a duplicate sample from the same location (R6AM2W).

The effect on reproduction (i.e., neonate production) of *C. dubia* is described below by sampling area.

Site Area R2: For plot area R2, none had mean neonate production levels that were less than the laboratory control sample.

Site Area R3: For area R3, all samples from the transect nearest to the shore (R3AU1W, R3AM1W, and R3AD1W) and the two most upstream samples from the middle transect

(R3BU1W and R3BM1W) were shown to have mean neonate production that was significantly lower than their respective control sample. The downstream sample from the middle transect (R3MD1W) and the sample from the farthest transect (R3CM1W) did not have mean neonate production levels that differed significantly from their respective control samples. For both the R3A and R3B sampling transects, neonate production was lowest for the upstream samples and increased in downstream samples. However, neonate production rates for downstream (R3A and R3B) samples were still lower than the laboratory control.

Site Area R4: For area R4, only one sample (R4AD1W) showed reduced reproduction compared to the laboratory control.

Site Area R5: For area R5, no samples had mean neonate production lower than the laboratory control.

Site Area R6: For area R6, only one sample (R6BM1W), showed reduced reproduction compared to the laboratory control.

7.1.7 EVALUATION OF FISH COPEC BODY BURDENS (MEASUREMENT ENDPOINT 1.e)

Exposure to COPECs in diets and in surface water may result in accumulation in fish tissue, which can affect the survival, growth and reproduction of the fish. Risks to Site fish were evaluated by comparing maximum concentrations of COPECs in fish tissue to body burden-based TRVs identified in Section 5.2. As previously mentioned, fish tissue results were obtained by Menzie-Cura as part of the Krummrich work (Menzie-Cura, 2001).

As described in Section 3.2.5, concentrations of several dioxin congeners were higher in the upstream (UDA) and/or downstream (DDA) reference area fish than in the Site (PDA) area fish. Concentrations of two compounds (2-methylphenol and 4,4'-DDE) were higher in downstream reference fish samples than in Site fish samples.

HQs for all COPECs in Site fish and reference area fish were <1.0, except for MCPP from the Site (HQ_{max} = 1.5). As described in Section 5.2, a large uncertainty factor was incorporated into

the development of the TRV for MCPP. Uncertainties related to the use of the TRVs for MCPP and other COPECs are discussed in Section 8.

7.1.8 EVALUATION OF RISKS TO THE FEDERALLY ENDANGERED PALLID STURGEON (MEASUREMENT ENDPOINT 7.a)

The pallid sturgeon is of special importance as a receptor organism because of its federal listing and because sediment contact to the pallid sturgeon is expected to be higher than for more pelagic species. Therefore, additional sturgeon-specific toxicity literature was reviewed. While no pallid sturgeon-specific studies were located, some data exists regarding ecologically relevant endpoints (survival, growth and reproduction) to other sturgeon species. A study by Dwyer, *et al* (2000) was identified showing that three species of sturgeon (shovelnose, shortnose and Atlantic sturgeon) are very sensitive to carbaryl, 4-nonylphenol, permethrin, copper and pentachlorophenol. Of these five contaminants, only copper and pentachlorophenol were detected in Mississippi River surface water near the Sauget Area 2 Sites.

The most sensitive sturgeon toxicity values for both copper (LC_{50} = 60 ug/L for Atlantic sturgeon) and pentachlorophenol (LC_{50} = 70 ug/L for shortnose sturgeon) were chosen to compare site-related surface water concentrations. To derive LOAEL values, the LC_{50} values were lowered by a factor of 10 (copper LOAEL = 6 ug/L; pentachlorophenol LOAEL = 7 ug/L). To derive NOAEL values, the LOAEL values were lowered by another factor of 10 (copper NOAEL = 0.6 ug/L; pentachlorophenol NOAEL = 0.7 ug/L).

In 2002, the maximum detected surface water value for copper (39 ug/L) exceeded both the NOAEL and LOAEL value, indicating risks. The maximum detected surface water value for pentachlorophenol (1.9 ug/L) exceeded the NOAEL value, but not the LOAEL value, indicating minimal risks.

In 2007, after installation of the groundwater barrier wall, copper was not detected in surface water. However, to be very conservative, ½ the copper detection limit (1.95 ug/L) was used for comparison. Using ½ the detection limit, copper exceeded the NOAEL value but not the LOAEL value, indicating a minimal risk.

In 2007, pentachlorophenol was also not detected in surface water. Again, to be very conservative, ½ the pentachlorophenol detection limit (0.125 ug/L) was used for comparison. Using ½ the detection limit, pentachlorophenol was lower than both the LOAEL and NOAEL, indicating no risk.

Para-chloroaniline was determined to be a risk to the fish population due to the high HQs in both surface water and sediments. However, the risks to the federally endangered pallid sturgeon as well as other fish populations would be minimal for the following reasons:

- Sediment toxicity tests determined that there were no significant toxic effects for any of the Site-related sediment samples;
- Surface water samples collected after installation of the groundwater barrier wall at Site R did not have detectable levels of p-chloroaniline.
- Sediment bioaccumulation tests with clams did not yield p-chloroaniline in any of the tissue samples;
- Larger fish species collected from the Mississippi River in an area adjacent to where the highest calculated concentrations of p-chloroaniline were reported did not have p-chloroaniline in their tissue;
- The highest adjusted value (based on ½ the detection limit) in fish tissue from the Mississippi River for p-chloroaniline was 495 ug/kg and the associated fish TRV (Table 7-50) is 2439 ug/kg, which results in an HQ of 0.20; and
- Benthic invertebrate populations were more numerous and more diverse in the area adjacent to the Sauget Area 2 Sites compared to the upstream reference location.

For the above stated reasons, it is not anticipated that the potential risks to the pallid sturgeon would warrant any further investigation

7.2 FLOODPLAIN RISK CHARACTERIZATION

The floodplain assessment evaluated several assessment endpoints. Those endpoints included the survival, reproduction, and growth of two piscivorous wildlife species that utilize the Mississippi River in the vicinity of the Sites (Assessment Endpoint #2). Other assessment endpoints include the evaluation of the risks resulting from exposures to COPECs in prey of

vermivorous wildlife (Assessment Endpoint #3), herbivorous wildlife (Assessment Endpoint #4) and carnivorous wildlife (Assessment Endpoint #5), all of which may be utilizing the Sites. While hypothetical risks to vermivorous wildlife (short-tailed shrews) were calculated, because the habitat within the disposal sites does not appear to be suitable for shrews, the importance of this animal was more as a transfer mechanism for COPECs to carnivores (red fox) that would feed on shrews.

Finally, the floodplain assessment evaluated the potential for adverse changes in the survival, reproduction, and growth of potential fish populations within the two ponds located in the southern end of Site Q (Assessment Endpoint #6). The ponds are ephemeral in nature and as such, the pond evaluation included in this BERA is worst-case and reflective of historic conditions not current circumstances.

7.2.1 EVALUATION OF SITE-WIDE POTENTIAL ECOLOGICAL RISKS TO PISCIVOROUS WILDLIFE

This section discusses risks as they relate to Assessment Endpoint #2. The floodplain assessment identified minimal risks to mink and osprey feeding on fish from the river and the pond. Individual COPECs included only those detected in surface water and fish tissue and that exceeded upstream (background) HQs. Of the identified COPECs, none of the average daily exposures exceeded their respective LOAELs indicating that any risks would be only to sensitive individuals and not the population as a whole. Tables 7-16, 7-17 and 7-18 list the COPECs that were developed for the mink and osprey from adjacent downstream river areas. The identified COPECs based on mink food chain modeling include nitrobenzene, MCPP, PCBs, dioxins/furans, aluminum and arsenic.

Mink HQs from the upstream (sample plot R1) location are shown in Table 7-19. Mink HQs from the river adjacent to the Sites (sampling plots R2, PDA, R3, R4, and R5) are shown in Tables 7-20 (2002 sampling) and 7-22 (2007 sampling). Mink HQs from the downstream sampling area (sampling plot R6) are shown in Table 7-21.

The estimated ecological risks for the mink were driven by the consumption of fish from the large pond. The pond is an ephemeral water body that will support a fish community on a temporary basis, only if fish are washed into the ponds through overbank flooding of the

Mississippi River. Fish were collected from the large pond and analyzed for the presence of COPECs. If those COPECs associated with fish from the pond are removed from the modeling (a reflection of reality as the community no longer exists), then the only COPECs identified for the mink would be nitrobenzene (adjacent river), MCPP (adjacent river) and arsenic (downstream river). The risks associated with those COPECs are slight, as they do not exceed their LOAEL TRVs and are not significantly above background values.

HQs are presented for the osprey in Tables 7-23, 7-24, 7-25 and 7-26. The only COPEC that was identified for the osprey was mercury for the adjacent river areas. As with the mink, the LOAEL-based TRV was not exceeded. The driving factor for the exceedance was the concentration of mercury in fish tissue from the river. However, the concentration in fish tissue was estimated using surface water concentrations and BCFs, as the fish collected by Menzie-Cura were not analyzed for metals. This is very conservative, as the surface water AWQC for mercury was not exceeded. The mercury HQ for the osprey in the upstream reference area was calculated to be 8.7. The mercury HQ for the area adjacent to the Site was 9.0, and for the downstream area the HQ was 8.7. It is apparent that the mercury was not site-related.

In summary, the potential for impacts to higher trophic level predators feeding primarily on aquatic receptors (exposed to COPECs in the Mississippi River and/or the large pond) is minimal. The minimal risks that do exist are eliminated each time the ponds dry up.

7.2.2 Evaluation of Potential Ecological Risks to Herbivorous and Vermivorous Wildlife

The following sections discuss the potential for adverse ecological impacts to occur as a result of the exposure of herbivorous and vermivorous wildlife to COPECs in surface soil at each of the Sites. This evaluation addressed risks related to Assessment Endpoints #3 and #4.

7.2.2.1 Site P Potential Ecological Risks

Two measurement endpoints (risks to short-tailed shrews and prairie voles) were used to assess the potential for adverse ecological impacts to occur at Site P. The assessment of Site P was based on the use of 12 data points for surface soil concentrations, plant and insect tissue

concentrations and the earthworm bioaccumulation study. Since the habitat at Site P is not suitable for short-tailed shrews, the prairie vole is the more representative receptor species.

HQs were calculated for the vole for Site P using both average chemical concentrations and maximum chemical concentrations for comparison to off-Site locations (Table 7-27 and Table 7-28) and are shown in Table 7-29 and Table 7-30. For Site P, the individual vole-based COPECs included:

Compound	Maximum Concentration HQ based on:	
	NOAEL	LOAEL
Dioxins/furans	1.9	< LOAEL TRV
Cobalt	2.4	< LOAEL TRV
Mercury	1.5	< LOAEL TRV
Selenium	6.3	3.8
Vanadium	6.2	< LOAEL TRV

Based on the food chain modeling conducted for the vole only selenium (a natural constituent in soils) exceeded both the NOAEL and LOAEL TRVs for both maximum and average concentrations. However, even the maximum HQ for selenium was only 6.3, therefore, the risks to the vole from exposure to selenium at Site P is minimal.

Several other COPECs exceeded TRVs in the vole food chain models; dioxins/furans, cobalt, mercury and vanadium. However, all of these showed HQs of less than 10, and were very similar to the values found in the off-site reference areas (Tables 7-27 and 7-28), indicating that while they pose minimal risks, they are not site-related.

All other exceedances of the TRVs were based on all input parameters that were ½ detection limits for non-detected values and/or were equal to or less than the associated Reference area HQ; therefore, they were not considered COPECs.

In addition to the food chain evaluation of the prairie vole, an evaluation of the ability of the vegetative community to provide habitat for wildlife was performed as part of impact to herbivorous wildlife measurement endpoint. The rationale for the approach was that plants that

were physiologically impacted by the presence of COPECs at a given site would not be able to provide appropriate habitat for wildlife within that disposal site. However, the phytotoxicity benchmarks are highly conservative, as noted by the benchmark authors, and often rely on hydroponic data that is not realistic in terms of on-site conditions.

Based on the screening of detected surface soil concentrations of organic and inorganic constituents, the COPECs listed below were noted for Site P. The location of the maximum HQ for the COPEC and its value are also presented in the following list (Figure 2.2). Table 7-31 summarizes the HQs calculated based on the comparison of surface soil chemical data to impact to vegetation benchmarks.

For Site P, individual COPECs based on a potential impact to plants included:

COPEC	Location	HQ
Ethylbenzene	SA-P-2	16
Tetrachloroethene	SA-P-2	5,900
Xylenes (total)	SA-P-2	74
Anthracene	W-P-2	2.3
Benzo(a)anthracene	W-P-2	680
Benzo(a)pyrene	W-P-2	6.7
Benzo(b)fluoranthene	W-P-2	680
Benzo(k)fluoranthene	W-P-2	570
bis(2-Ethylhexyl)phthalate	SA-P-1	30
Fluoranthene	W-P-2	17
Indeno(1,2,3-cd)pyrene	W-P-2	240
Phenanthrene	W-P-2	220
Pyrene	W-P-2	180
4,4'-DDT	W-P-4	110
Dioxins/Furans	W-P-2	max = 380
Aluminum	SA-P-1	166

COPEC	Location	HQ
Arsenic	W-P-1	2.6
Barium	AT-P-4	1.4
Cadmium	AT-P-3	6.3
Chromium	AT-P-4	100
Copper	AT-P-3	2.5
Iron	AT-P-4	160
Lead	SA-P-1	40
Manganese	AT-P-4	5.4
Mercury	AT-P-5	19
Nickel	AT-P-4	4.3
Selenium	W-P-1	7.0
Thallium	W-P-1	1.3
Vanadium	AT-P-4	130
Zinc	AT-P-3	62

Tetrachloroethene, barium, manganese, and vanadium from Site P samples had the highest HQs noted for the entire Sauget Area 2 Sites. However, barium and manganese did not significantly exceed their respective benchmarks. The maximum exceedances of the plant benchmarks for arsenic, selenium, and thallium were located at sample location W-P-1. During the field studies in support of this BERA it was noted that some of the vegetative community around W-P-1 appeared sparse; however, that was considered to be the result of poor soil conditions as much of the soil in that area resembled cinders. There were no obvious indications of phytotoxic effects (*e.g.,* dead/dying plants, wilting, or chlorosis) in Site P.

A food chain evaluation of the potential for ecological risks to the short-tailed shrew based on earthworm bioaccumulation data and terrestrial invertebrate data was conducted. However, none of the surface soil and plant samples used as input parameters to the food chain model were collected in habitat suitable to support the shrew. As such, the food chain results for the shrew are not realistic.

Additionally, a qualitative comparison of the maximum surface soil sampling results (based on detected concentrations) to screening benchmarks for earthworm toxicity (Efroymson *et al,* 1997b) indicated that metals (cadmium, chromium, copper, lead, mercury, and zinc) concentrations in the surface soil exceeded their respective benchmarks. This suggests that these constituents have the potential to limit the presence of earthworms as a prey source in the areas where the soil samples were collected. However, noting that earthworms are only a component of the shrew diet (USEPA, 2003), and extensive populations of ground-dwelling insects were observed during the insect sampling activities, it is questioned whether potential impacts to earthworm populations would realistically impact food sources for the shrew. The identified metals did bioaccumulate in the earthworm bioaccumulation tests that were used to support the shrew food chain modeling, however, only chromium and zinc concentrations in the worm were above both control and background worm concentrations.

HQs were calculated for the shrew for Site P using both average chemical concentrations and maximum chemical concentrations for comparison to off-Site locations (Table 7-32 and Table 7-33) and are shown in Table 7-34 and Table 7-35. For Site P, the individual shrew-based COPECs included:

Compound	Maximum Concentration HQ based on:	
	NOAEL	LOAEL
Dieldrin	1.8	< LOAEL TRV
MCPA	168	34
PCBs	5.1	< LOAEL TRV
Dioxins/furans	62	6.2
Aluminum	659	66
Arsenic	50	5.0
Barium	6.1	1.6
Chromium	3.1	< LOAEL TRV
Cobalt	58	5.8
Lead	17	1.7
Manganese	2.3	< LOAEL TRV
Mercury	5.1	1.0

Compound	Maximum Concentration HQ based on:	
	NOAEL	LOAEL
Selenium	8.8	5.3
Silver	2.1	< LOAEL TRV
Vanadium	248	25
Zinc	1.2	< LOAEL TRV

With the exceptions of MCPA, aluminum and vanadium, none of the constituents significantly exceeded their respective LOAEL values. However, MCPA and aluminum HQs were not significantly above background HQs.

In conclusion, selenium and vanadium were the only constituents that were COPECs for both receptors at maximum and average concentrations and in soil. Table 7-36 summarizes all individual COPECs identified for the various Site P receptors.

7.2.2.2 Site R Potential Ecological Risks

Only minimal ecological risks were identified with Site R given that a cap that extends several feet deep covers this Site. The assessment of Site R was based on the use of four data points for surface soil concentrations, plant and insect tissue concentrations and the earthworm bioaccumulation results. The majority of the vegetative COPECs (Table 7-31) were metals. It is noted that Site R does not provide any habitat for a short-tailed shrew, and that the assessment of the vole and the plants is a more appropriate assessment for the site.

For Site R, the COPECs based on a comparison of detected concentrations to phytotoxicity benchmarks included:

COPEC	Location	HQ
Tetrachloroethene	W-R-2	1.2
Trichloroethene	W-R-4	3.8
Aluminum	W-R-3	200
Chromium	W-R-1,W-R-3	17

COPEC	Location	HQ
Iron	W-R-1,W-R-3	90
Manganese	W-R-1	2.4
Vanadium	W-R-1	17

The plant COPECs in Site R are mostly inorganics that are common components of soil. The exceptions, tetrachloroethene and trichloroethene, are only slightly above their associated soil screening benchmark value.

HQs for the vole based on both average chemical concentrations and maximum chemical concentrations for Site R are shown in Table 7-37 and Table 7-38. For Site R, the vole based COPECs using the maximum concentrations, included:

Compound	Maximum Concentration HQ based on:	
	NOAEL	LOAEL
Cobalt	1.6	< LOAEL TRV
Mercury	3.3	< LOAEL TRV
Vanadium	1.1	< LOAEL TRV

The risks are minimal since no LOAEL HQs were exceeded and the NOAEL HQs are all less than 5.0.

In animals, absorption of cobalt is dependent on the compound type, dose, animal weight and nutritional status. In rats, approximately 30% of cobalt (as cobalt chloride) was absorbed. Iron deficiency increases cobalt absorption (ATSDR, 1992c). Within biological systems, mercury is transformed into compounds with high toxicities that are mutagenic, teratogenic, and carcinogenic with embryocidal, cytochemical and histopathological effects. However, mercury toxicity in mammals is modified by the age, sex, sexual condition, and diet of the animal as well as the season and other variables. A body burden of less than 250 μg/kg for mammals and a daily dose of 32 μg/kg-bw for birds have been suggested (Eisler, 2000). Vanadium is present in all mammals; however, tissue concentrations are very low (ATSDR, 1992f) due to low gastrointestinal absorption in animals (less than 0.1 to 2.6% in rats). Absorption in rats is higher

in young animals due to a greater non-selective permeability in the undeveloped intestinal barrier. Dermal absorption is minimal. Due to low bioavailability, biomagnification of vanadium is unlikely (ATSDR, 1992f).

HQs for the shrew based on both average chemical concentrations and maximum chemical concentrations for Site R are shown in Table 7-39 and Table 7-40.

For Site R, the shrew-based COPECs, based on the maximum concentrations, included:

Compound	Maximum Concentration HQ based on:	
	NOAEL	LOAEL
MCPP	26	8.6
Dioxins/furans	19	1.9
Cobalt	31	3.1
Manganese	1.0	< LOAEL TRV
Selenium	2.2	1.3
Vanadium	33	3.3

A qualitative comparison of the maximum surface soil sampling results, which were based on a detected concentration, to screening benchmarks for earthworm toxicity (Efroymson *et al,* 1997b) indicated that chromium concentrations in the surface soil exceeded its benchmark. This suggests that chromium has the potential to limit the presence of earthworms as a prey source in the areas where the soil samples were collected. However, as noted above, earthworms are only a component of the shrew diet (USEPA, 2003), and extensive populations of ground-dwelling insects (also consumed by shrews) were observed during the insect sampling activities. As such, it is questioned whether potential impacts to earthworm populations would realistically impact food sources for the shrew. Chromium did bioaccumulate in the earthworm bioaccumulation tests used to support the shrew food chain modeling, however, concentrations of chromium in the worms from Site R were not above background worm concentrations.

Two NOAEL HQs and all of the LOAEL HQs were less than 10 and in one instance, the LOAEL was not exceeded. Therefore, the ecological risks associated with the identified COPECs were considered to be slight for the short-tailed shrew.

In conclusion, vanadium was the only constituent that was a COPEC for both receptors at maximum and average concentrations and in soil. Table 7-40 summarizes all COPECs identified for the various Site R receptors.

7.2.2.3 Site O Potential Ecological Risks

The assessment of Site O was based on the use of 12 data points for surface soil concentrations, plant and insect tissue concentrations and the earthworm bioaccumulation results. Four of the soil samples were located in sub-area Site O (North) and one was located in sub-area O (South). As with the Sites P and R, based on the type of habitat found in the site, the prairie vole is a more representative receptor than the shrew.

For Site O, the COPECs that were identified by screening detected surface soil chemical data against phytotoxicity benchmarks included the following (Table 7-31):

Compound	Location	HQ
Benzene	SOIL-O-5	22
Ethylbenzene	W-O-1	88
Tetrachloroethene	W-O-1	29
Xylenes, total	W-O-1	1,600
1,2-Dichlorobenzene	SOIL-O-5	1,100
2,4-Dichlorophenol	SOIL-O-5	1,880
Benzo(b)fluoranthene	SA-O-1	360
Benzo(k)fluoranthene	SA-O-1	340
bis(2-Ethylhexyl)phthalate	SA-O-2	24
Hexachlorobenzene	SOIL-O-5	255
Indeno(1,2,3-cd)pyrene	SA-O-1	230
Pentachlorophenol	SOIL-O-5	160

Compound	Location	HQ
Pyrene	SA-O-1	55
4,4'-DDD	W-O-3	8.6
4,4'-DDT	W-O-3	23
Dieldrin	W-O-3	360
Lindane	W-O-3	640
PCBs	W-O-1	18
Dioxins/furans	W-O-1	max = 49,000
Aluminum	SOIL-O-4	220
Arsenic	W-O-1, SA-O-1	1.1
Barium	SA-O-1	1.1
Cadmium	SOIL-O-5	8.0
Chromium	SOIL-O-5	42
Copper	SOIL-O-5	6.8
Iron	SOIL-O-4	85
Lead	SA-O-1	3.4
Manganese	SA-O-4	1.12
Mercury	SA-O-1	600
Nickel	SOIL-O-5	4.7
Selenium	SA-O-1	10
Silver	SA-O-1, SOIL-O-5	2.1
Vanadium	SA-O-3, SOIL-O-4	14.5
Zinc	SOIL-O-5	48

Ethylbenzene, xylenes (total), pentachlorophenol, dioxins/furans, mercury, and selenium from Site O samples had the highest HQs noted for the entire Sauget Area 2 Sites. In addition, benzene and hexachlorobenzene were only detected in soils from Site O above benchmark and background values.

While a number of constituents were identified as exceeding conservative benchmarks, there were no signs of phytotoxic stress in the vegetative community at Site O.

The results of food chain modeling of soil and plant COPECs for the vole based on both average chemical concentrations and maximum chemical concentrations for Site O are shown in Table 7-42 and Table 7-43. The individual COPECs in Site O that posed risks to prairie voles included:

Compound	Maximum Concentration HQ based on:	
	NOAEL	LOAEL
Pentachlorophenol	3.7	< LOAEL TRV
PCBs	18	1.8
Dioxins/furans	127	13
Mercury	8.0	1.6
Vanadium	1.0	< LOAEL TRV

Pentachlorophenol and vanadium showed NOAEL HQs less than 5.0, with LOAEL HQs less than 1.0, indicating minimal risks. Mercury and PCBs both had LOAEL HQs of just over 1.0, again indicating minimal risks to the prairie vole. However, both the NOAEL and LOAEL HQs for dioxins/furans were significantly above 1.0 and their corresponding background values, indicating risks to the vole from exposure to these compounds.

Site O did not have suitable habitat for the short-tailed shrew. A qualitative comparison of the maximum surface soil sampling results, which were based on measured concentrations, to screening benchmarks for earthworm toxicity (Efroymson *et al,* 1997b) indicated that pentachlorophenol, cadmium, chromium, copper, mercury, and zinc concentrations in the surface soil exceeded their respective benchmarks. This suggests that these COPECs have the potential to limit the presence of earthworms as a prey source in the areas where the soil samples were collected. However, as noted above, earthworms are only a component of the shrew diet (USEPA, 2003), and extensive populations of ground-dwelling insects (also consumed by shrews) were observed during the insect sampling activities. As such, it is questioned whether potential impacts to earthworm populations would realistically impact food sources for the shrew. All of these constituents did bioaccumulate in the earthworm

bioaccumulation tests used to support the shrew food chain modeling, however, concentrations of chromium, copper, and zinc in the worms from Site O were not above background worm concentrations.

HQs for the shrew based on both average chemical concentrations and maximum chemical concentrations for Site O are shown in Table 7-44 and Table 7-45.

For Site O, the shrew based COPECs included:

Compound	Maximum Concentration HQ based on:	
	NOAEL	LOAEL
2,4-Dichlorophenol	1.6	< LOAEL TRV
Hexachlorobenzene	5.6	1.5
Pentachlorophenol	89	8.9
4,4'-DDT	1.5	< LOAEL TRV
Dieldrin	10	1.0
MCPA	922	184
PCBs	566	57
Dioxins/furans	4,136	414
Aluminum	620	62
Arsenic	25	2.5
Barium	4.3	1.1
Chromium	1.0	< LOAEL TRV
Cobalt	24	2.4
Copper	4.0	3.1
Mercury	144	29
Selenium	6.1	3.7
Silver	3.3	< LOAEL TRV
Vanadium	33	3.3

Since the available habitat on Site O is not suitable for shrews, the realistic risks from site COPECs are minimal.

Many of the COPECs in the above table exhibit NOAEL HQs less than 10, and most LOAEL HQs were either less than or very near 1.0. As such, the ecological risks to the short-tailed shrew associated with the Site O COPECs were considered to be slight.

In conclusion, PCBs, dioxins/furans, and mercury were the only COPECs for both receptors at maximum and average concentrations and in soil. Table 7-46 summarizes all COPECs identified for the various Site O receptors.

7.2.2.4 Site S Potential Ecological Risks

The assessment of Site S was based on the evaluation of two data points for surface soil concentrations, plant and insect tissue concentrations and the earthworm bioaccumulation results. As with Sites P, R and O, based on the type of habitat found in the site, the prairie vole is a more representative receptor than the shrew receptor for Site S.
Site S had a number of constituents in surface soil that exceeded the impact to vegetation benchmarks. However, there were no obvious indications of phytotoxic effects. The vegetation at Site S showed excellent growth, and there were no indications of dead plants, wilting, or chlorosis.

For Site S, the COPECs that were identified through the comparison of constituents detected in surface soil to phytotoxicity benchmarks included:

Compound	Location	HQ
1,2,4-Trichlorobenzene	W-S-1	1.8
1,2-Dichlorobenzene	W-S-1	37,000
1,3-Dichlorobenzene	W-S-1	1,000
2,4-Dichlorophenol	W-S-1	4,600
Benzo(a)anthracene	W-S-1	8,000

Compound	Location	HQ
Benzo(a)pyrene	W-S-1	54
Benzo(b)fluoranthene	W-S-1	6,600
Benzo(k)fluoranthene	W-S-1	6,400
bis(2-Ethylhexyl)phthalate	W-S-1	130
Dibenzo(a,h)anthracene	W-S-1	1,800
Fluoranthene	W-S-1	42
Indeno(1,2,3-cd)pyrene	W-S-1	1,300
Naphthalene	W-S-1	3.5
Pentachlorophenol	W-S-1	147
Phenanthrene	W-S-1	1,840
Pyrene	W-S-1	2,800
4,4'-DDD	W-S-1	170
4,4'-DDE	W-S-1	330
4,4'-DDT	W-S-1	1,600
beta-BHC	W-S-1	26,000
Endrin	W-S-1	10,000
Lindane	W-S-1	150,000
PCBs	W-S-1	25
Aluminum	SA-S-1	188
Chromium	W-S-1	23
Manganese	W-S-1	1.3
Vanadium	SA-S-1	14

Nearly all of the PAHs in the above list, all of the pesticides, the PCBs,1,2-dichlorobenzene and 2,4-dichlorophenol from the Site S samples yielded the highest HQs for all of the Sauget Area 2 Sites. In addition, 1,2,4-trichlorobenzene, 1,3-dichlorobenzene, and naphthalene were only detected in soils from Site S above benchmark and background values. However, 1,2,4-trichlorobenzene and naphthalene did not significantly exceed their associated benchmarks.

While a number of COPECs were identified that could theoretically impact plants, the food chain modeling for the vole identified only four COPECs. HQs for the vole are shown in Table 7-47 and Table 7-48 and are based on both average and maximum chemical concentrations for Site S. The COPECs in Site S that posed risks to prairie voles included:

Compound	Maximum Concentration HQ based on:	
	NOAEL	LOAEL
Pentachlorophenol	3.4	< LOAEL TRV
PCBs	25	2.5
Cobalt	1.3	< LOAEL TRV
Mercury	1.7	< LOAEL TRV

PCBs were the most significant COPEC out of this group, although the LOAEL was only slightly exceeded. The risk to voles from exposure to PCBs would only be slight.

HQs for the shrew based on both average and maximum chemical concentrations for Site S are shown in Table 7-49 and Table 7-50. A qualitative comparison of the maximum surface soil sampling results, which were based on a detected concentration, to screening benchmarks for earthworm toxicity (Effroymson *et al,* 1997b) indicated that 1,2,4-trichlorobenzene, pentachlorophenol, and chromium concentrations in the surface soil exceeded their respective benchmarks. This suggests that these constituents have the potential to limit the presence of earthworms as a prey source in the areas where the soil samples were collected. However, as noted above, earthworms are only a component of the shrew diet (USEPA, 2003), and extensive populations of ground-dwelling insects (also consumed by shrews) were observed during the insect sampling activities. As such, it is questioned whether potential impacts to earthworm populations would realistically impact food sources for the shrew. Only chromium was detected in the earthworm bioaccumulation test results from Site S but was not above background worm concentrations.

For Site S, the shrew based COPECs included:

Compound	Maximum Concentration HQ based on:	
	NOAEL	LOAEL
2,4-Dichlorophenol	1.9	< LOAEL TRV
4-Nitroaniline	1.4	< LOAEL TRV
Benzo(a)anthracene	1.1	< LOAEL TRV
Chrysene	2.0	< LOAEL TRV
Pentachlorophenol	80	8.0
4,4'-DDT	3.7	< LOAEL TRV
beta-BHC	3.2	< LOAEL TRV
Dieldrin	8.5	< LOAEL TRV
Endrin	8.4	< LOAEL TRV
Endrin-ketone	1.6	< LOAEL TRV
Hepatochlor	1.7	< LOAEL TRV
Dinoseb	5.2	< LOAEL TRV
MCPA	153	31
PCBs	651	65
Cobalt	26	2.6

The most significant COPECs based on the shrew modeling were MCPA and PCBs. However, the MCPA HQs were only slightly above the background HQs of 140 (NOAEL) and 27 (LOAEL). MCPA is therefore not likely to be a site-related contaminant.

In conclusion, pentachlorophenol and PCBs were the only COPECs for both receptors at maximum and average concentrations and in soil. Table 7-51 summarizes all COPECs identified for the various Site S receptors.

7.2.2.5 Site Q (South) Potential Ecological Risks

The assessment of Site Q was based on the evaluation of 26 data points for surface soil concentrations, plant and insect tissue concentrations and the earthworm bioaccumulation results. As with the Sites P, R, O and S, the habitat on Site Q (south) was not suitable for the

short-tailed shrew, and the prairie vole is a more representative receptor species (Ballenger, 2000). Site Q (South) had a number of COPECs in surface soil that exceeded the vegetation benchmarks. However, there were no obvious indications of phytotoxic effects. The vegetation at Site Q (South) showed excellent growth, and there were no indications of dead, wilting, or chlorotic vegetation. The COPECs identified through comparison to benchmarks include:

Compound	Location	HQ
Tetrachloroethene	AT-Q-33	170
Trichloroethene	SA-Q-10	17
Xylenes (total)	W-Q-11	5.0
Anthracene	W-Q-10	14
Benzo(a)anthracene	W-Q-10	4,500
Benzo(a)pyrene	W-Q-10	53
Benzo(b)fluoranthene	W-Q-10	4,800
Benzo(k)fluoranthene	W-Q-10	4,400
bis(2-Ethylhexyl)phthalate	W-Q-11	433
Dibenzo(a,h)anthracene	AT-Q-35	440
Fluoranthene	W-Q-10	80
Indeno(1,2,3-cd)pyrene	AT-Q-35	1,200
Pentachlorophenol	W-Q-11	1.2
Phenanthrene	W-Q-10	1,260
Pyrene	W-Q-10	860
4,4'-DDD	AT-Q-33	1.8
4,4'-DDE	W-Q-11	57
4,4'-DDT	W-Q-9	260
Aldrin	SA-Q-10	1.7
alpha-BHC	W-Q-11	80
beta-BHC	W-Q-9	11
Dieldrin	W-Q-11	800

Compound	Location	HQ
Endrin	W-Q-9	170
Lindane	SA-Q-14	148
Dioxins/furans	W-Q-11	max = 5,700
Aluminum	S-Q-13	280
Antimony	W-Q-9	9.4
Arsenic	W-Q-9	3.3
Barium	W-Q-11	3.0
Cadmium	AT-Q-33	2,000
Chromium	W-Q-9	660
Cobalt	W-Q-9	1.0
Copper	W-Q-11	26
Iron	W-Q-9	450
Lead	W-Q-9	62
Manganese	W-Q-9	4.2
Mercury	AT-Q-35	467
Nickel	W-Q-9	17
Selenium	W-Q-11	3.0
Silver	W-Q-11	8.5
Thallium	W-Q-11, AT-Q-33	3.3
Vanadium	S-Q-13	18
Zinc	AT-Q-33	60

Of the 43 COPECs in the table above, 12 had HQs between 1.0 and 10, indicating that the ecological risks associated with exposure to plants for those constituents is minimal. Most of the maximum exceedances of the impact to plant benchmarks were located in the central and northeastern sections of the Site. Vegetation in these areas was particularly thick. While Site Q (South) had the largest lists of COPECs that exceeded plant benchmarks, the field studies conducted in support of the BERA did not find any indications of an impacted plant community anywhere on Site Q.

A number of COPECs were identified that could theoretically impact plants. However, the food chain modeling that evaluated potential ecological risks to voles identified only five COPECs. HQs for the prairie vole for Site Q (South) are shown in Table 7-52 and Table 7-53. For Site Q (South), COPECs for the prairie vole included:

Compound	95% UCL Concentration HQ based on:	
	NOAEL	LOAEL
Dioxins/furans	4.3	< LOAEL TRV
Antimony	1.0	< LOAEL TRV
Cobalt	1.4	< LOAEL TRV
Mercury	2.4	< LOAEL TRV
Thallium	4.6	< LOAEL TRV

None of the COPECs identified above have significant exceedances of their respective TRVs. The potential for adverse ecological impacts to the prairie vole from these COPECs is considered to be slight.

None of the surface soil samples used as input parameters to the food chain modeling were collected in habitat suitable to support the shrew. As such, the food chain results for the shrew are not representative. A qualitative comparison of the maximum surface soil sampling results, which were based on a detected concentration, to screening benchmarks for earthworm toxicity (Efroymson *et al,* 1997b) indicated that metals (cadmium, chromium, copper, lead, mercury, nickel, and zinc) concentrations in the surface soil exceeded their respective benchmarks. This suggests that these metals have the potential to limit the presence of earthworms as a prey source in the areas where the soil samples were collected. However, as noted above, earthworms are only a component of the shrew diet (USEPA, 2003), and extensive populations of ground-dwelling insects (also consumed by shrews) were observed during the insect sampling activities. As such, it is questioned whether potential impacts to earthworm populations would realistically impact food sources for the shrew. All of these constituents did bioaccumulate in the earthworm bioaccumulation tests used to support the shrew food chain modeling, however, concentrations of cadmium, copper, lead, nickel, and zinc in the worms from Site O were not above background worm concentrations.

HQs for Site Q (South) for the shrew are shown in Table 7-54 and Table 7-55 and are based on both average and maximum chemical concentrations. For Site Q (South), the shrew-based COPECs included:

Compound	95% UCL Concentration HQ based on:	
	NOAEL	LOAEL
Dibenzofuran	33	3.3
Hexachlorobenzene	5.5	1.5
4,4'-DDT	1.0	< LOAEL TRV
Dieldrin	10	1.0
Heptachlor epoxide	6.3	< LOAEL TRV
MCPA	167	33
PCBs	59	5.9
Dioxins/furans	197	20
Aluminum	780	78
Antimony	9.7	< LOAEL TRV
Arsenic	29	2.9
Barium	5.7	1.5
Cadmium	12	1.2
Chromium	2.6	< LOAEL TRV
Cobalt	29	2.9
Copper	3.3	2.5
Lead	6.9	< LOAEL TRV
Mercury	14	2.9
Selenium	2.5	1.5
Silver	3.3	< LOAEL TRV
Thallium	30	3.0
Vanadium	37	3.7

Of those constituents, only MCPA, dioxins/furans and aluminum had significantly elevated HQs above the LOAEL TRVs. Of those three COPECs, only dioxins/furans were significantly above the background HQ value.

In conclusion, dioxins/furans and cobalt were the only constituents that were COPECs for both receptors at maximum and average concentrations and in soil. Table 7-56 summarizes all COPECs identified for the various Site Q (South) receptors.

7.2.3 EVALUATION OF SITE-WIDE POTENTIAL ECOLOGICAL RISKS TO CARNIVOROUS WILDLIFE

A food chain evaluation of the risks to the red fox based on modeled consumption of shrews and voles was employed to assess whether COPECs at the Sites had the potential to impact upper trophic level organisms (Assessment Endpoint #5). The assumption was that red fox would feed on an equal amount of shrews and voles as part of foraging across the disposal sites. Therefore, body burden calculations for the shrew and vole served as a pathway from surface soil COPECs to this upper trophic level organism. In keeping with OSWER Directive 9285.7-28P (USEPA, 1999c), the more critical receptor is the red fox.

Risks were calculated based on exceedance of TRVs and exceedance of HQs calculated for the red fox using off-site surface soil concentrations and 2002 surface water data (Table 7-57). On-Site HQs are presented for the red fox using average chemical concentrations and 2002 surface water data in Table 7-58. On-site HQs are also presented using average surface soil concentrations and 2007 surface water data in Table 7-59.

Using the average input values of soil, surface water, plants, and modeled prey body burdens (prairie vole and short-tailed shrews), COPECs for the red fox included:

Compound	Average Concentration HQ based on:	
	NOAEL	LOAEL
PCBs	5.0	< LOAEL TRV
Dioxins/furans	21	2.1
Aluminum	49	4.9
Arsenic	2.8	< LOAEL TRV
Cadmium	4.4	< LOAEL TRV
Cobalt	2.5	< LOAEL TRV
Mercury	9.9	5.9
Thallium	6.6	< LOAEL TRV

Out of the eight COPECs determined for the red fox, only dioxins/furans and aluminum were significantly above their NOAEL TRV benchmark. However, only dioxins/furans were significantly above background HQ concentrations. When taking into consideration bioavailability of these congeners, it is assumed that the relative risk to the fox would decrease to a level that would not be considered significant to the population. Another consideration to keep in mind for the risk to the fox is the fact that the habitat at the Sites was not anticipated to support any shrew populations. The relative risk to the fox from dioxins/furans was heavily influenced by the ingestion of shrews (61% of the ADD). Therefore, if shrews are not present at any of the Site areas, the risk to the fox would decrease by 61%, which would bring the NOAEL HQ down to 8.2.

In addition, the red fox has a mean home range of 1,727 acres, so it is highly unlikely that the Sites (total area is less than 150 acres) would support a large population of red fox. Noting the discontinuity of the sites, it is more likely that a small number of fox utilize a portion of different Site areas for foraging, moving between contaminated and non-contaminated areas. Additionally, the fence surrounding Site R would limit access of the fox to this area. Site-wide COPECs, based on the red fox, are listed in Table 7-60.

7.2.4 Evaluation of Potential Ecological Risks Associated with Site Q (Ponds)

Risks to the fish populations in the two ponds located at the southern end of Site Q were evaluated using the same measurement endpoints used to evaluate risks to the fish in the Mississippi River (Section 5.2). However, the greatest risk to the fish populations that are periodically washed into these ephemeral ponds is the drying of the pond. The evaluation of measurement endpoints discussed here describes conditions that no longer exist.

At the time of the 2002 evaluation, the smaller pond was dry and the larger pond was significantly reduced in size and dried up shortly following sample collection. Both ponds refilled following rains in May and June 2003. However, because overbank flooding did not occur, the fish population had not been reestablished.

Sediment HQs were calculated through the comparison of COPECs detected in a single sediment sample (with a duplicate) collected in the large pond in November of 2002 to acute

conservative sediment benchmarks. As previously noted, because the ponds are ephemeral in nature, sediments and surface water COPECs were compared to acute benchmarks. Only dioxins and furans showed HQs in excess of 1.0. However, both total TCDD and total TCDF had HQs of 4.0 or less. Table 7-61 lists HQs for the sediment sample from the large pond.

Sediment HQs greater than 1.0 were found in the northern end of the large pond (Location LP-1) for lindane, PCBs, cadmium and lead. None of these had a HQ in excess of 5.0, indicating minimal risks. In the southeastern end of the large pond, total dioxins/furans were the only COPEC with HQs greater than 1.0. The HQs calculated for pond sediments are listed in Table 7-61.

In the southeastern end of the small pond, dioxins/furans were also detected with HQs greater than 1.0. In the northern end of the small pond, PCBs, copper, lead and nickel were found to have HQs greater than 1.0. The HQs calculated for small pond sediments are listed in Table 7-62.

Table 7-63 lists HQs for the two surface water samples collected from the large pond in 2002. . Of the analytes detected in P-11W, only aluminum (HQ = 10) and barium (HQ = 1.8) had HQs of greater than 1.0. The risks associated with these COPECs are slight.

HQs were calculated for the surface water collected from both ponds in June 2003. Barium was found at all sampling locations in both ponds, with HQs at all locations between 1.0 and 5.0. In the small pond, benzo(a)pyrene was also detected in two of the three samples with a HQ slightly above 1.0. The low HQs indicate minimal risks. Surface water HQs are listed in Table 7-64.

While not included as a measurement endpoint in the BERA, bioaccumulation studies were used to qualitatively evaluate the bioavailability of COPECs in the sediment. Table lists the COPECs that accumulated in the tissues of the test clams. Organic COPECs that accumulated include PCBs and dioxin/furans with the small pond exhibiting lower concentrations than the large pond. Inorganic COPECs that accumulated were limited to calcium and barium in the large pond.

Table 7-65 lists the HQs calculated through the comparison of pond fish COPEC tissue body burdens to body burden-based TRVs. Exceedance of these TRVs suggests that the COPECs within the fish tissues have the potential to adversely impact the fish. It is important to note that the fish collected from the ponds were washed in by flooding of the river just a couple weeks before collection. There are no permanent reproductive populations in the ponds. Therefore, it is likely that the entire COPEC body-burden was from the river and not from the site ponds. Additionally, the fish in the ponds are all lost each time the pond dries up. Table 7-66 lists the COPECs identified in the ponds.

Toxicity tests for surface water and sediment collected from the large pond in 2002 showed no significant toxicity to the test species.

Toxicity tests performed on the 2003 surface water and sediment samples collected from the large pond also showed no significant toxicity to the test species. Toxicity tests performed on the 2003 surface water samples collected from the small pond showed slight toxicity to fish. Toxicity tests performed on the 2003 sediment samples collected from the small pond showed toxic effect in all three samples. One sample (SP-1) had complete mortality of chironomids and 88% mortality of amphipods. Bioassay results are listed in Tables 7-67 and 7-68.

7.3 ECOTOXICOLOGY

As previously outlined, a variety of COPECs have been identified for the various sites. However, ecotoxicological properties of the COPECs can mitigate the actual expression of predicted ecological risks. A receptor must be exposed such that the toxicant must first enter the body through an exposure route (inhalation, ingestion or dermal contact) before interacting with cells. This is a concept known as bioavailability. For the purpose of the BERA, the COPECs were assumed to be 100 percent bioavailable.

Bioavailability is an important concept in risk assessments because toxicological effects are not elicited merely from the presence of a chemical. Bioavailability is defined as that portion of the exposure concentration that actually reaches the systemic (arterial) circulation for distribution through the body and/or to the target organ. A chemical's bioavailability is affected by physical, chemical, and biological factors such as physical adsorption (*e.g.,* K_{oc}), lipid (fat) solubility and

chemical adsorption, among others (Hamelink, *et al.*, 1994). Bioavailability determines if a chemical will bioaccumulate and/or biomagnify. Bioaccumulation is defined as the net accumulation of a substance in a living organism from all routes of exposure. Biomagnification is the tendency of a chemical to accumulate to higher concentrations at higher trophic levels through dietary accumulation (Suter, 1993).

The fate and transport of the various COPECs identified as part of the Floodplain Risk Assessment COPECs are discussed in Appendix III-D and Appendix III-E discusses their ecotoxicological expression and bioavailability.

8.0 UNCERTAINTIES IN THE RISK ASSESSMENT

There are several sources of uncertainty associated with ecological risk estimates. This includes initial selection of COPECs based on the sampling data, estimates of toxicity to ecological receptors based on limited laboratory data (usually on other species), and uncertainties in exposure and effects assessment. This section describes some of these uncertainties along with actions taken to manage this uncertainty within the assessment.

8.1 COMPONENTS OF THE UNCERTAINTY ANALYSIS

Uncertainty in risk estimation has both qualitative and quantitative components. Qualitative uncertainty analyses are recommended by guidance (USEPA, 1988c) and contribute to the confidence with which risk assessment conclusions can be drawn and applied (USEPA 1989a; 1992a). Quantitative uncertainty analyses provide objective measures of the relative confidence in the conclusions that have been drawn in an evaluation.

Uncertainty surrounding risk assessment conclusions has important implications for risk management (USEPA 1988c; 1998). However, uncertainty is not a single, generally applicable parameter. Uncertainty surrounding a risk estimate or application has a number of components, including parameter variability, calculation error and simplification, and the underlying reality of exposure assumptions and pathways (USEPA 1988c). Uncertainty includes both real variation (reflecting actual, mechanistic biological response ranges and variability in ecosystem conditions) and error (USEPA, 1997a). Because biological systems are inherently uncertain and variable, some component of variability in risk estimation is due to a realistic reflection of ecological conditions, while another component is due to error or uncertainty introduced by the overall analytical process. Error is the component to be minimized, because this encompasses undesirable uncertainty that has been introduced by the assessment process. However, it is critically important to understand ecosystem variability because this represents an important component of the ecosystem within which risk management decisions must be made. Substantial differences exist between observations and conclusions made at the individual, population, and community levels of biological organization. For example, effects not manifested at the population or community levels (*e.g.,* mortality of only a few individuals) may not be observable with the type of studies implemented. The ramifications of this also include

an understanding that, because the assessment level endpoints are protective of populations and communities and not individuals except in the case of the pallid sturgeon, the projected loss of a few individuals may not cause impacts that are important at the levels of assessment where risk management decisions are made.

Due to the multiplicity of potential receptor species and general lack of knowledge regarding their life cycles, feeding habits, nutritional requirements (*e.g.,* essential elements such as arsenic, trivalent chromium, selenium, zinc), and relative toxicological sensitivity, the uncertainty surrounding estimates of ecological risks may be substantially greater than those associated with human health risk assessment. The generic screening and regulatory criteria and TRVs used in this assessment are intended to provide conservative benchmarks, but it is important to note that no one approach to criterion/TRV derivation is adequate for all sites and all chemicals. The criteria/TRVs used in this assessment are all chemical-specific and as such, cannot address the additive, antagonistic, or synergistic effects of the chemical mixtures typically found in the environment (Swartz *et al.,* 1988). Further, these criteria/TRVs do not take into account the structure and dynamics of the ecosystem present at the site, site-specific conditions regulating chemical contact and bioavailability, the potential toxicity of other constituents that were not quantified, or the pervasive influence of physical stressors associated with the disruption by human activities that is characteristic of an area that has been actively industrial for over 100 years, or the result of periodic flooding from the Mississippi River.

The evaluations presented herein were performed within a range of conditions defined by characteristics of the environment at the time field data were gathered. As such, data obtained and conclusions drawn represent a series of "snap-shots" of Site conditions and, while they can be extrapolated to a broad range of conditions, they are most accurate when Site conditions are most similar to those that existed at the time of sampling. In addition, screening criteria do not necessarily reflect the entire range of possible site conditions and, as such, the applicability of conclusions is restricted by these simplifications as well. Identified contributors to these uncertainties are specified below as it pertains to sampling/analysis, exposure, and bioavailability/bioaccumulation/biomagnification/ecotoxicology.

8.2 UNCERTAINTIES IN THE AQUATIC EXPOSURE ASSESSMENT

- Those analytes that were not detected in a medium were excluded from further consideration. Similarly, those COPECs that were detected at less than 5% frequency in exposure media (i.e., surface water and sediments) were also excluded from further consideration. This is a generally accepted practice in ecological risk evaluation in order to prioritize those contaminants that may pose risks. However, it is possible that some compounds were reported as non-detect (ND), but the reporting limit (RL) was above the ecotoxicological benchmarks. These laboratory method limitations introduce some uncertainty in risk evaluation.

- Duplicate samples were utilized as discrete samples. The use of this approach may over-represent levels of contamination at a disposal site and may, therefore, over-estimate ecological risks.

- Fish tissue data were not collected for this BERA but were from the data collected for the Krummrich work. The Krummrich work was focused around the PDA area, situated between areas R2 and R3 in this report. This source of uncertainty, due to the small area of fish collection, is unlikely to adversely affect the risk evaluation because fish move around the area and fish tissue results are likely to integrate contaminants present throughout the area in various exposure media (surface water, sediments, prey).

- Another source of uncertainty in fish tissue data is that metals were not measured in the Krummrich report, whereas metals were included as target analytes in the analysis of surface water, sediments, and bioaccumulation tests in this study. It is not clear if any Site-related metals are present in fish tissue at high enough concentrations to cause adverse effects.

- The revised work plan called for collecting sediment samples for benthic community identification only if “field observations of collected sediments during the habitat survey indicate that the substrate is substantially different from those sediments observed in the Krummrich work”. Based on this, benthic samples were collected from only two locations, one in the Site area (R6AD) and another in the reference (R1BD) area. Thus,

in the sediment triad approach, sediment COPEC concentrations and toxicity results could not be compared with the abundance and diversity of benthic community function at all locations.

8.3 UNCERTAINTIES IN THE AQUATIC EFFECTS ASSESSMENT

- There is uncertainty in the selection and use of screening benchmark values for sediment, surface water, and fish tissue data. Surface water benchmarks from Federal (NAWQC), State (IL EPA) or other sources (Tier II SCVs, LCVs) were used. Some of these benchmarks have been developed with limited data, and there are some uncertainties associated with the use of these benchmarks. The guidelines are applied recognizing these limitations, which could tend to either overestimate or underestimate the risks to aquatic organisms.

- The sediment quality guidelines used to screen COPECs must be recognized as very coarse, informal guidelines and are not necessarily applicable to conditions at the Site. In the case of the sediment quality criteria, none exist against which concentrations of COPECs can be compared to definitively evaluate potential risks. This is because the cumulative uncertainties, inherent measurement errors, and differences between laboratory and *in situ* conditions in current approaches (*e.g.,* apparent effects thresholds, spiked sediment bioassays, equilibrium partitioning) make them far too imprecise for regulatory use as more than very general screening values. In particular, recent efforts by the USEPA to base sediment quality criteria for nonionic organic chemicals on AWQC using equilibrium partitioning have been highly variable, and existing documentation demonstrates that water column species are not necessarily representative of, or of similar sensitivity to, species inhabiting bottom sediments.

- Several different sediment quality benchmarks were available in the literature and when multiple values were available for a chemical, they were selected and used in a hierarchical approach as described in the work plan. Each of these literature-reported benchmarks was derived for different endpoints and test organisms. In addition, for several compounds, sediment quality guidelines were not available in the literature, and for some of those compounds, benchmarks were derived based on their geochemical

properties, toxicity tests and other approaches as described in Section 5.1.1. The lack of availability or the use of derived benchmark values introduces uncertainties in risk evaluation. Therefore, these guidelines, when available, were applied recognizing these limitations, which could tend to overestimate the risks to aquatic organisms.

- Analytical data for river fish are seven years old, which may not be indicative of current conditions. Physical/chemical degradation processes, such as biodegradation, volatilization, photooxidation, and/or sorption may have attenuated chemical concentrations, especially organic constituents. Thus, the BERA is conservative.

- Fish body burden-based TRV benchmarks were developed for each contaminant with one specific organism, where different biological effects (e.g., mortality, growth) had been correlated to fish tissue concentrations of the contaminant. Data were not always available for the fish species found at the Site and the measurement endpoints of interest in this study (i.e., no-effect levels on adult fish, growth/reproduction/mortality effects, and whole body analysis). Uncertainties are introduced in the use of other fish species, in the conversion of endpoints (LD_{50} or LOAEL to NOAEL), in the use of surrogate data for some compounds (for 2-methylphenol, alpha-BHC, gamma-Chlordane, endosulfan I, and endrin aldehyde), and in the estimation of TRVs from toxicity tests (2,4,5-T; 2,4,5-TP; MCPP). This could tend to overestimate the risks to aquatic organisms.

- Uncertainty in the interpretation of toxicity test results stems from the potential for loss of contaminants and changes in contaminant bioavailability that can occur during sample handling and testing, differences between laboratory and field conditions, and differences between test organisms and the biota that might assimilate the contaminants differently. Although sediments and surface water samples were shipped under low temperature, some of the VOCs could have been lost from test sediments and surface water samples between the time of collection and the time the organisms were exposed to the media. This would possibly underestimate the toxicity of site media to test organisms. Only four VOC compounds (1,2-dichlorobenzene, 1,4-dichlorobenzene, chlorobenzene, and toluene) were detected in sediments at concentrations exceeding sediment quality guidelines (the other analyte, acetone is likely a laboratory

contaminant), and no surface water VOCs were above water quality guidelines. Thus, it appears that the potential loss of any VOCs is unlikely to significantly underestimate true toxicity.

- TRVs were not available for some compounds and few were available for the pallid sturgeon.

- Risks to aquatic endpoint species associated with dioxins and furans were based on using TEFs to calculate the TEQs which were then compared to the TRV for a single dioxin congener (2,3,7,8 TCDD). This may lead to an overestimation of risk due to the fact that 2,3,7,8 TCDD is considered the most toxic of all the dioxin/furan congeners and TEQs are only estimations of relative toxicity compared to 2,3,7,8 TCDD.

- The aquatic exposure assessment assumed 100% bioavailability of COPECs identified in surface water. This is a significant overestimation of the risks as numerous references in the scientific literature have determined that many compounds, such as dioxins/furans, are far below that level.

8.4 UNCERTAINTIES IN THE FLOODPLAIN EXPOSURE ASSESSMENT

- Surface soil sampling was generally biased towards areas of known contamination so that estimates of the actual underlying distribution of COPECs are conservative and there was little opportunity to establish a gradient of ecological risks. As such, the BERA could only characterize risks in areas where contamination was known to occur and could not define areas within the disposal sites where acceptable risks might occur. This has resulted in an overestimation of ecological risks associated with the disposal sites.

- Duplicate samples were utilized as discrete samples. The use of this approach may over-represent levels of contamination at a disposal site and may, therefore, over-estimate ecological risks.

- The floodplain exposure assessment assumed 100% bioavailability of COPECs identified in surface soil. This is a significant overestimation of the risks as numerous

references in the scientific literature have determined that organic and inorganic constituents adsorb to soils.

- Limited surface soil sampling was conducted in each of the disposal areas to identify and characterize the presence of COPECs in surface soil rather than delineation. Thus, ecological risks for the disposal areas were overestimated.

- Chromium analysis was completed only for total chromium and did not differentiate for hexavalent chromium. Risks may be overestimated as the TRV is based on hexavalent chromium rather than the less toxic trivalent chromium.

- For analytes that were not detected in environmental media, the value of one-half of the detection limit was substituted as a sample concentration. This simplistic technique introduces uncertainty, the direction and magnitude of which cannot be quantified but is conservative because of the probability of including false positives.

- Certain chemicals (*e.g.,* acid extractables) were not detected in most samples but were included as COPECs because of high detection limits. Given the degradation rates of some of these chemicals, it is probable that these constituents are not contained within the environmental media and the biota. Therefore, HQs for these COPECs may overestimate risks.

- Due to limitations in the collection of terrestrial invertebrates, composite samples and assumptions regarding the distribution of the COPECs identified in invertebrate tissue were necessary. This uncertainty could either overestimate or underestimate the ecological risks to shrews.

- ADDs were derived based on the assumption that site-specific food sources used in the model for the ROIs (*e.g.,* shrews and voles for the fox, plants for the prairie vole, fish for mink) comprise 100% of the ROI dietary intake. This does not represent actual field conditions. This assumption may lead to an overestimation of the risks as some of the ROIs incorporate other food sources from other areas into their diet.

- The estimation of ADDs in prairie voles and short-tailed shrews was completed using the highest detected concentrations in most cases (Site Q (South) was calculated based on the 95% UCL), which assumes that an organism would be exposed to a fixed COPEC concentration at a fixed sample location for its entire life. This conservative approach leads to an overestimation of the risks.

- Single values, rather than ranges, have been provided for body weight, ingestion rates, home ranges, and uptake and bioaccumulation factors and incorporated into the ADD calculations. These values represent exposure factors for an average adult receptor and do not account for natural variability or intraspecies differences due to sex, age, pregnancy, or lactation. The effect of this uncertainty cannot be quantified nor is the direction of bias able to be determined.

- ADDs for the red fox were estimated assuming that COPEC body burdens in short-tailed shrews were equal to the prey's COPEC intake (ADD). This uncertainty associated with prey uptake factors have not been established for the red fox; thus, the effect of this uncertainty cannot be quantified nor is the direction of bias able to be determined.

- NOAELs and LOAELs were not available for all compounds, therefore, in some instances, TRVs for structurally similar compounds were used, such as di-n-butylphthalate for di-n-octylphthalate. The effects of these uncertainties cannot be quantified nor can the direction of the bias be determined.

- There are uncertainties associated with the selection of TRVs that are based on secondary sources found within the scientific literature. The effects of these uncertainties cannot be quantified nor can the direction of the bias be determined.

- Values for the 50% lethal dose (LD_{50}) were used if a LOAEL/NOAEL was not available. The LD_{50} values were treated the same as a subchronic LOAEL with an uncertainty factor of 100 applied. The effects of these uncertainties are conservative and will overestimate risks.

8.5 UNCERTAINTIES IN THE FLOODPLAIN EFFECTS ANALYSIS

- Phytotoxicity benchmarks from Efroymson *et al.* (1997) used in the BERA to determine soil HQs are greater than literature trace element concentrations from mature leaf tissue considered normal or sufficient for antimony, cadmium, chromium, mercury, nickel, selenium, silver, and thallium (Allen *et al.*, 1995; Pendias and Pendias, 1992). Thus, the risk estimates for these metals may be overestimated.

- COPEC screening phytotoxicity benchmarks derived by Efroymson *et al.*, (1997) are, by admission of the authors, highly conservative and not necessarily predictive of site-specific effects.

- Given that data were either rejected or no analysis was completed for certain compounds for some areas, the ADDs for some COPECs may not be complete. Data were rejected for the following:

  Acetone was rejected for soil sample Soil-O-1; 4,4'-DDD and alpha-chlordane was rejected for Soil-Q-2, and Soil-Q-4; and 4,4 DDD was rejected for sample number Soil-Q-12. 4,4'-DDT, and all the herbicides except for Dinoseb were rejected for pond sediment sample number P11S. 2,4, Dimethylphenol was rejected for the following insect tissue samples and plant samples: IN Q1, IN Q2, IN OS1, IN P1, IN Q1, IN Q2, IN ROS1, PL-OS-2, PL-OS-3, PL-OS-4, PL-O-1, PL-O-2, PL-O-3, PL-P-1, PL-P-2, PL-P-3, PL-P-4, PL-R-1, PL-R-2, PL-R-3, PL-R-4, PL-S-1. All herbicides except for 2,4,5-TP and Dinoseb were rejected for the worm sample #13 (Site Q-16).

- TRVs were estimated using NOAELs/LOAELs primarily derived from laboratory animals. Laboratory animals are bred for their chemical sensitivity and the environment in which laboratory animals are kept, as well as the manner in which they may be dosed (*e.g.,* gavage) does not reflect *in situ* conditions. Thus, TRVs most likely overestimate risks.

- NOAEL/LOAELs were not available for most wildlife receptors but were estimated by:

- Extrapolation from laboratory rodents (mice, rats) to wild rodents (shrews, prairie voles) and other mammals (fox)
- Extrapolation of NOAELs/LOAELs from different feeding niches (*e.g.*, granivorous birds [domestic chickens, Japanese quail] or omnivorous birds [blackbird] to the piscivorous osprey);
- Extrapolation from NOAELs to LOAELs and vice versa; and
- Extrapolation from acute/LD_{50} or subchronic studies to chronic studies.

- Wildlife TRVs are conservative because the lowest NOAEL/LOAEL benchmarks in the scientific literature were chosen if multiple doses were provided.

- HQs from silver in terrestrial receptors may be overestimated due to low half-life persistence and rapid clearance from the body.

- NOAEL/LOAEL benchmarks are single points that infer that all organisms will have adverse effects above that concentration. It does not account for individual or population variability. The effects of this uncertainty cannot be quantified nor the direction of bias determined.

- Risks to terrestrial endpoint species associated with dioxins and furans were based on using TEFs to calculate the TEQs which were then compared to the TRV for a single dioxin congener (2,3,7,8 TCDD). This may lead to an overestimation of risk due to the fact that 2,3,7,8 TCDD is considered the most toxic of all the dioxin/furan congeners and TEQs are only estimations of relative toxicity compared to 2,3,7,8 TCDD. In addition, the bioavailability of TCDD from soil is only approximately 30%. Other higher chlorinated congeners such as OCDD are even less bioavailable due to their molecular size and essential non-solubility in water, leading to an even further overestimation of risk from dioxins/furans.

8.6 UNCERTAINTIES WITH ECOTOXICOLOGY

- The analysis performed for this assessment did not account for site-specific factors such as adaptive tolerance, reproductive potential, the small size of the affected areas, and

recruitment from similar adjoining areas. Such factors would tend to mitigate the degree and ecological significance of loss or impairment of a portion of ecological population(s) due to both chemical and physical stressors in the area. As a result, the approach used in this assessment necessarily results in an overestimation of the risks.

- ADDs were calculated based on 100% bioavailability and do not account for various degradation processes that may affect concentrations within the environmental media. The chemical concentration available for systemic circulation to the target organ is considerably smaller than the environmental concentration; thus, risk estimates are overestimated.

- HQs based on low molecular weight SVOCs (*e.g.*, pentachlorophenol) and some metals (e.g., barium, chromium, cobalt, copper) are overestimated because scientific literature indicates that these compounds do not bioaccumulate/biomagnify but quickly volatilize or biodegrade or are rapidly metabolized and excreted from the organism.

- Uncertainties regarding the assessment endpoints (*e.g.*, regulatory criteria such as the AWQC sediment quality guidelines) derive principally from the fact that they are conservative and generic and protective of all species, including the most sensitive, rather than site-specific indicators of potential risks to ecological receptors present at the Site. AWQC are derived from the highest quality and most applicable data that were available at the time of development. However, the physiology and toxicology/pharmacology of COPECs, particularly in relation to the wildlife taxa identified as ROIs, is known only with some certainty. This conservatively biased uncertainty will affect risk estimates in a manner that cannot be quantified, but incorporates both error and biological variation. The latter is likely the largest component of uncertainty, because organisms have highly variable responses to toxicants, and extrapolation from laboratory studies to field exposure estimates incorporates this conservatively biased uncertainty into the risk estimates.

9.0 RESULTS AND CONCLUSIONS

This BERA evaluated the potential for adverse ecological impacts to occur as a result of the exposure of receptors found within the Mississippi River adjacent to the Area 2 Sites and the floodplain area containing the Area 2 Sites to COPECs originating from five disposal sites. To assess the potential for adverse ecological impacts to occur, seven assessment endpoints were evaluated.

The following conclusions can be drawn based on the completion of this BERA.

9.1 POTENTIAL AQUATIC ECOLOGICAL RISKS IN THE MISSISSIPPI RIVER

Ecological risks to aquatic receptors in the Mississippi River were assessed through the collection of surface water and sediment samples from locations upstream, adjacent to, and downstream of the Sites. The samples were chemically analyzed to determine the concentrations of COPECs. Bioassays were run on both surface water and sediment samples to evaluate acute and chronic toxic effects to the test species. Additionally, bioaccumulation tests were conducted to determine the body burdens of COPECs in test organisms exposed to sediments for an extended period of time. Fish tissue body burdens identified in historic sampling activities were also evaluated to assess potential ecological impacts.

The results of the BERA for the different evaluated media are presented below. Tables 9-1, 9-2 and 9-3 summarize the COPECs identified in various aquatic media by this BERA.

Sediments – The BERA concluded that there were no adverse ecological impacts associated with the presence of COPECs in sediments.

Chemical analysis of sediments indicated that there were measurable concentrations of COPECs in the sediments of the Mississippi River adjacent to the Sites and that some measured concentrations exceeded conservative ecologically-based benchmarks. The COPECs included VOCs, such as 1,2-dichlorobenzene, 1,4-dichlorobenzene, acetone, chlorobenzene, and toluene; one SVOC (p-chloroaniline); pesticides such as 4,4'-DDD, dieldrin, endrin aldehyde, and heptachlor epoxide; one herbicide (2,4-D); and metals such as arsenic,

barium, cadmium, copper, lead, manganese, nickel, and zinc. The highest detected concentrations of organic COPECs were located along transects closest to the shore in the sampling areas located downgradient of Site Q (North), Site Q (Central), and Site R. None of the inorganic COPECs exceeded their respective benchmarks by a significant degree and the pattern of distribution throughout the sampling plots adjacent to or downstream of the Sauget Area 2 Sites appeared to be random.

Although there were COPECs that exceeded conservative ecologically-based benchmarks, the sediment bioassays (considered to be a stronger indicator of potential toxic effects) demonstrated that there were no significant toxic effects in any of the sediment samples. For the acute toxicity test, there were no significant differences in mean survival when Site-related samples were compared to their respective control samples for any of the sampling sites adjacent to, or downstream of, the disposal areas. Similarly, the chronic test concluded that none of the sediment samples collected from any of the sampling plots exhibited mean growth that was significantly lower than the mean growth of the corresponding laboratory control samples.

Surface Water - The BERA concluded that prior to the construction of the interim remedial action for groundwater there were some ecological risks associated with the presence of COPECs in Mississippi river surface water. Surface water COPECs that exceeded conservative ecologically-based benchmarks identified through chemical analyses included p-chloroaniline, 2,4-D, aluminum (total), barium (dissolved, total), copper (total), iron (total), manganese (total), and vanadium (dissolved, total). In the surface water samples collected in 2002, p-chloroaniline had the greatest exceedance of its conservative screening benchmark, with a HQ of 800. The maximum concentration of p-chloroaniline was detected at the sampling area downgradient of Site Q (North) and just downstream of Site R on the transect closest to the riverbank. Aluminum and barium were the only other two constituents that significantly exceeded their screening benchmark but they did not significantly exceed background concentrations.

Surface water samples were also collected from the area downstream of Site R after the installation of the interim remedial action for groundwater (in 2005 and 2007). These surface water samples did not have measurable concentrations of p-chloroaniline or 2,4-D. This

indicates that the source of p-chloroaniline and 2,4-D discharge into the Mississippi River was remediated by installation of the groundwater barrier wall.

The sturgeon-specific COPECs, copper and pentachlorophenol also appeared to be mitigated after installation of the groundwater barrier wall.

Surface water bioassays indicated that acute toxicity was limited to the sampling area downgradient of Site Q (North) and just downstream of Site R. The sample with the lowest survival and young production in bioassay tests corresponded to the surface water sample that had the highest concentrations (by nearly an order of magnitude) of p-chloroaniline. Chronic toxicity was also seen at other sampling locations downstream where elevated concentrations of p-chloroaniline were noted. The groundwater barrier wall appeared to effectively eliminate the discharge of p-chloroaniline into the river, and it is probable that aquatic toxicity has also been eliminated.

Aquatic Risk Assessment Conclusions - The BERA concluded that no adverse ecological impacts were identified with sediments within the Mississippi River and that aquatic risks associated with surface water have been mitigated by the groundwater barrier wall.

In addition, the potential risks to the federally endangered pallid sturgeon as well as other fish populations were determined to be minimal for a number of reasons including:

- There were no significant toxic effects for any of the Site-related sediment samples;
- Sediment bioaccumulation tests in clams did not detect p-chloroaniline in any of the samples;
- Larger fish species collected from the Mississippi River did not have any detected concentrations of p-chloroaniline in their tissue samples;
- The highest adjusted value in fish tissue from the Mississippi River for p-chloroaniline was 495 ug/kg and the associated fish TRV is 2439 which would result in an HQ of 0.20; and
- Benthic invertebrate populations were more numerous and more diverse in the area adjacent to the Sauget Area 2 Sites compared to the upstream reference location.

The installation of the groundwater barrier wall appears to have eliminated the source of the COPECs discharging into the Mississippi River from Site R..

9.2 POTENTIAL ECOLOGICAL RISKS IN THE FLOODPLAIN

The BERA evaluated the potential for COPECs to impact ROIs in the floodplain of the Mississippi River. The floodplain risk assessment addressed both the terrestrial habitats within the Sites and the ephemeral ponds located in Site Q. Risks were evaluated on a site-by-site basis using wildlife species with small home ranges (prairie vole and short-tailed shrew) and large home ranges (osprey, mink and red fox). The vole and shrew were used as endpoint species because of their small foraging areas and on a study area-wide basis for the osprey, mink and fox because of their large foraging areas. For the small-ranging organisms at the individual sites, the prairie vole was considered the most appropriate indicator of risks because habitat suitable to support the short-tailed shrew was not dominant at the Sites. Risks to these organisms were calculated based on food chain models using concentrations of COPECs identified in surface soil, plant tissues, and invertebrate body burdens as input parameters. Surface soil sampling used to support the BERA was biased towards the worst-case conditions. As such, the findings of the Floodplain assessment are not necessarily representative of the conditions of the Sites, but instead just the portions of the disposal areas with the highest concentrations of COPECs.

Piscivores - A limited number of COPECs were identified for consumption of fish and surface water by the mink and osprey, two organisms that were evaluated based on aquatic exposures. The riverbank adjacent to the Sauget Area 2 Sites is not suitable habitat for any fish-eating mammal because much of the 14,000 linear feet of riverbank is covered with stone riprap, rather than vegetative cover. The remainder of the bank contains piers, pilings, buildings and other human disturbances, which would preclude piscivorous mammals from inhabiting the area. Therefore, it is unlikely that any piscivorous mammals would have significant exposure to COPECs related to the Area 2 Sites.

After the 2002 sampling event, nitrobenzene, MCPP, PCBs, dioxin/furans, aluminum and arsenic were all identified as COPECs for the mink. After installation of the groundwater barrier wall, the 2007 sampling event identified only MCPP, PCBs, dioxins/furans and arsenic as

COPECs. However, most of the estimated ecological risks for the mink were based on consumption of fish from the larger of the two ephemeral ponds in the southern end of Site Q. Fish that had been washed into the pond by overbank flooding of the Mississippi River were collected prior to its evaporation, and analyzed for the presence of COPECs. If those fish are removed from the modeling, as the community no longer exists, then the only COPECs identified for the mink is MCPP. The risks associated with these COPCES were slight as they were not significantly above NOAEL TRVs or background values.

After the 2002 sampling event, mercury and thallium were the only COPECs for the osprey. The ecological risks were minimal, since mercury and thallium concentrations were only slightly above the NOAEL TRV levels and background levels. After installation of the groundwater barrier wall, the 2005 and 2007 sampling events did not identify mercury or thallium as COPECs. The BERA showed no COPECs that exceeded benchmark values and background levels posing risks to the osprey.

Plants - The potential for direct impact to plants was evaluated by comparing surface soil concentrations to screening plant benchmarks. A variety of COPECs in each Site were identified with concentrations in excess of these benchmarks. Site Q had the highest number of COPECs in excess of the conservative screening plant benchmarks. However, in general, Sites O and S had the maximum concentrations of organic constituents and Site Q had the maximum concentrations of inorganic constituents.

These benchmarks are considered to be highly conservative even by the authors and no indication of impacts to plants was noted in field observations conducted at the Sites.

Herbivores - In examining the potential for ecological risks at the Sites, no significant risks were identified at Sites P, R, S, or Q (South) for the prairie vole. Risks were present only at Site O., where only dioxins/furans significantly exceeded both the NOAEL and the LOAEL benchmark values and background concentrations. Potential areas of ecological risks at Site O for the vole are based on soil concentrations centered on sampling locations W-O-1, located in area O (North), and W-O-3. These sampling locations are shown on Figures 9-1 and 9-2. It is noted that there are large uncertainties associated with these figures. With the limited surface soil sampling that was conducted in each of the disposal areas, it is not possible to accurately

bound the areas of concern that are depicted on Figures 9-1 through 9-3. However, it was necessary to consider potential areas of adverse ecological risks in the Feasibility Study for further evaluation, so best professional judgment was used to identify the area boundaries.

Carnivores - An assessment of the potential for site-wide risks to the red fox was conducted. The assessment was made based on modeled exposure to prey items (the short-tailed shrew and the prairie vole). In keeping with OSWER Directive 9285.7-28P, as an upper trophic level organism, the red fox was considered be the more critical receptor while the importance of the two small mammals was as prey items.

Based on the food chain modeling, the BERA identified that there is some potential for adverse ecological risks to the red fox based on the assumption that the carnivore would feed on short-tailed shrews and prairie voles in Site O and Site Q. In the food chain modeling, dioxins/furans and mercury exceeded their NOAEL and LOAEL benchmarks, indicating a potential for an ecological risk. However, mercury was not significantly above background concentrations. Potential areas of ecological risks for the red fox based on calculated concentrations of dioxins/furans in prey items centered on sampling locations W-O-1, located in Site O (North), W-O-3, and W-Q-11 in Site Q. Since the risks from dioxins/furans were predicted using the shrew and the vole as a prey base for the fox, areas potentially needing remedial action to protect these organisms would also potentially protect the red fox. These areas are shown on Figures 9-1 through 9-3.

The red fox has a mean home range of 1,727 acres; it is highly unlikely that the Sites (total area less than 150 acres) would support a population of red fox. Noting the discontinuity of the sites, it is more likely that a small number of fox utilize a portion of different disposal areas for foraging, moving between contaminated and non-contaminated areas. Additionally, the fence surrounding Site R would limit access of the fox to this area.

Ponds – The primary risk to fish in the Site Q ponds is the periodic drying of the ponds. The ponds are ephemeral, and have no permanent reproducing fish population. Fish only occur in the ponds when the Mississippi River reaches a sufficient stage to inundate the ponds and deposit fish. When the river recedes, the ponds dry up and any remaining fish die.

The BERA evaluated ecological risks to aquatic receptors through analysis of surface water and sediment. Screening COPEC concentrations against conservative benchmarks indicated some potential for risks to aquatic receptors during the brief periods that these ponds contain water. Given the magnitude of the exceedances of the conservative benchmarks and the ephemeral condition of the ponds, it is concluded that no significant aquatic risks associated with the COPEC are present in the ponds.

Floodplain Risk Assessment Conclusions - The BERA identified risks associated with COPECs in surface soil throughout the Sauget Area 2 Sites. Site Q had the highest number of COPECs in excess of the conservative screening plant benchmarks. However, in general, Sites O and S had the maximum concentrations of organic constituents and Site Q had the maximum concentrations of inorganic constituents. Sites O (vole and fox) and Q (fox only) were the only areas considered to present risks to higher vertebrates for the floodplain assessment in association with high levels of dioxins/furans. These areas will be evaluated further in the Feasibility Study for the identification of potential remedial actions.

10.0 REFERENCES

Adams, SR, JJ Hoover, and KJ Killgore. 1999. Swimming Endurance of Juvenile Pallid Sturgeon, *Scaphirhynchus albus*. Copeia 1999(3), pp 802-807.

Adriano, D.C. 1986. Trace Elements in the Terrestrial Environment. Springer-Verlag, NY.

Allen, H.E., C.P. Huang, G.W. Bailey, and A.R. Bowers. 1995. Metal Speciation and Contamination of Soil. Lewis Publishers, Boca Raton, FL.

Allen, H.E. 2002. Bioavailability of Metals in Terrestrial Ecosystems: Importance of Partitioning for Bioavailability to Invertebrates, Microbes, and Plants. SETAC, Pensacola, FL.

AMEC. 2003a. Field Sampling Report for the Floodplain at Sauget Area 2 Sites, Sauget, IL. AMEC Earth and Environmental, Somerset, NJ. Draft Report, June 2003.

AMEC. 2003b. Field Sampling Report of Aquatic Sampling Activities at Sauget Area 2 Sites, Sauget, IL. AMEC Earth and Environmental, Marietta, GA. Draft Report, June 2003.

AMEC. 2003c. Draft Baseline Ecological Risk Assessment Report, Sauget Area 2 Sites (Sites O, P, Q, R, and S). August 2003.

AMEC. 2004. Draft Baseline Ecological Risk Assessment Addendum, Sauget Area 2 Sites, Sauget, IL. Amec Earth and Environmental, Somerset, NJ. Draft Report, March 2004.

American Society of Testing and Materials (ASTM). 1994. Standard Guide for Conducting Sediment Toxicity Tests with Freshwater Invertebrates. ASTM Designation E 1383-94.

Ankley, G.T., G.L. Phipps, E.N. Leonard, D.A. Benoit, V.R. Mattson, P.A. Kosian, A.M. Cotter, J.R. Dierkes, , D.J. Hansen, and J.D. Mahony. 1991. Acid-volatile sulfide as a factor mediating cadmium and nickel bioavailability in contaminated sediments. Environmental Toxicology and Chemistry 10**:**1299-1307.

Ankley, G.T., D.M. Ditoro, D.J. Hansen, and W.J. Berry. 1996a. Technical Basis and Proposal for Deriving Sediment Quality Criteria for Metals. Environmental Toxicology and Chemistry 15:2056-2066.

Ankley, G.T., D.M Ditoro, D.J. Hansen, and W.J. Berry. 1996b. Assessing the Ecological Risk of Metals in Sediments. Environmental Toxicology and Chemistry 15:2053-2055.

Antonious, G. F. and M.E. Byers, 1997. Fate and Movement of Endosulfan Under Field Conditions. Environmental Toxicology and Chemistry 16(4): 644-649.

Agency for Toxic Substances and Disease Registry (ATSDR). 1989. Toxicological Profile for N-nitroso-di-n-propylamine, U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1990a. Toxicological Profile for Copper. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1990b. Toxicological Profile for Silver. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR,. 1992a. Toxicological Profile for Antimony. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1992b. Toxicological Profile for Barium. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1992c. Toxicological Profile for Cobalt. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1992d. Toxicological Profile for Nitrophenols. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1992e. Toxicological Profile for Thallium. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1992f. Toxicological Profile for Vanadium. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1993a. Toxicological Profile for Cadmium. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1993b. Toxicological Profile for Aldrin/Dieldrin. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1993c. Toxicological Profile for Heptachlor/Heptachlor Epoxide. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1994a. Toxicological Profile for Hexachlorobutadiene. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1994b. Toxicological Profile for Pentachlorophenol. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1994c. Toxicological Profile for 4,4'-DDT, 4,4'-DDE, and 4,4'-DDD. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1995a. Toxicological Profile for Polycyclic Aromatic Hydrocarbons (PAHs). U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1995b. Toxicological Profile for Dinitrocresols. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1996a. Toxicological Profile for Endrin. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1996b. Toxicological Profile for Hexachlorobenzene. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1998. Toxicological Profile for Chlorinated Dibenzo-p-dioxins. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 1999. Toxicological Profile for Aluminum. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 2000a. Toxicological Profile for Endosulfan. U.S. Public Health Service, ATSDR, Atlanta, GA.

ATSDR. 2000b. Toxicological Profile for Polychlorinated Biphenyls. U.S. Public Health Service, ATSDR, Atlanta, GA.

Army Corps of Engineers (ACOE). 2003. ERED Database.http://ered1.wes.army.mil/ered/index.cfm.

Ballenger, L. 2000. *Blarina brevicauda* Short-tailed shrew.

Barrick, R. S., Becker, S., Brown. L., Beller, H., Pastorok, R. 1988. Sediment quality values refinement: 1988 update and evaluation of Puget Sound AET. Volume 1. Prepared for the Puget Sound Estuary Program, Office of Puget Sound.

Bargar, T.A., G.I. Scott, and G.P. Cobb. 2001. Maternal Transfer of Contaminants: Case Study of the Excretion of Three Polychlorinated Biphenyl Congeners and Technical-Grade Endosulfan into Eggs by White Leghorn Chickens (*Gallus domesticus*). Environmental Toxicology and Chemistry 20(1): 61-67.

Barnthouse, L.W. and G.W. Suter, II. 1986. User's Manual for Ecological Risk Assessment. ORNL-6251. Oak Ridge National Laboratory, Oak Ridge, Tennessee.

Barrows, M.E., S.R. Petrocelli, K.J. Macek, and J.J. Carroll. 1980. Bioconcentration and elimination of selected water pollutants by bluegill sunfish (*Lepomis macrochirus*). *In* Haque R., ed., Dynamics, Exposure and Hazard Assessment Of Toxic Chemicals, pp. 379-392.

Baudo, R., J. Giesy, H. Muntau. 1990. Sediments: Chemistry and Toxicity of In-Place Pollutants. Lewis Publishers, Chelsea, MI.

Bernardini, G., O. Spinelli, C. Presutti, C. Vismara, E. Bolzacchini, M. Orlandi, and R. Settimi. 1996. Evaluation of the Developmental Toxicity of the Pesticide MCPA and Its Contaminants Phenol and Chlorocresol. Environmental Toxicology and Chemistry 15(5): 754-760.

Beyer, W.N., E. Conner, and S. Gerould. 1994. Estimates of Soil Ingestion by Wildlife. Journal of Wildlife Management. 58:375-382.

Beyer, W.N., G.H. Heinz, A.W. Redmon-Norwood. 1996. Environmental Contamination in Wildlife: Interpreting Tissue Concentrations. Lewis Publishers. Boca Raton, FL.

Bishop, C.A., B. Collins, P. Mineau, N.M. Burgess, W.F. Read, and C. Risley, 2000. Reproduction of Cavity-Nesting Birds in Pesticide-sprayed Apple Orchards in Southern Ontario, Canada, 1988-1994. Environmental Toxicology and Chemistry 19: 588-599.

Blanchet, R., Liu, C., Souza, T., Bowers, T. 2001. Summary of available freshwater and marine sediment quality guidelines and their use in North America. SETAC Annual Conference, Baltimore, MD, November 2001.

Boyer, H.A. 1984. Trace elements in the water, sediments, and fish of the Upper Mississippi River, Twin Cities metropolitan area. *in* Contaminants in the Upper Mississippi River. J.G. Wiener, R.V. Anderson and D.R. McConville (eds.). Butterworth Publishers, Stoneham, MA.

Burton, G.A. 1992. Sediment Toxicity Assessment. Lewis Publishers, Boca Raton, FL.

Calder, W.A. and E.J. Braun, 1983. Scaling of Osmotic Regulation in Mammals and Birds. American Journal of Physiology 244:R601-R606.

California Environmental Protection Agency (CALEPA). 1997. Public Health Goal for Dinoseb in Drinking Water. Pesticide and Environmental Toxicology Section, Office of Environmental Health Hazard Assessment.

California Department of Toxic Substances Control. 1994. Guidance for Ecological Risk Assessment at Hazardous Waste Sites and Permitted Facilities. California Environmental Protection Agency, Department of Toxic Substances Control, Office of Scientific Affairs, Human and Ecological Risk Section. August, 1994.

Canada Soil Screening Values (1997, 2001).

Canadian Environmental Quality Guidelines. 2002. Summary of Existing Canadian Environmental Quality Guidelines (EQGs). Update 2002.

Canton, J.H., R.C.C. Wegman, T.J.A. Vulto, C.H. Verhoef, and G.J. van Esch. 1978. Toxicity, accumulation and elimination studies of α-hexachlorocyclohexane (α-HCH) with saltwater organisms of different trophic levels. Water Research 12:687:690.

Chapman, P.M., J. Downie, A. Maynard, and L.A. Taylor. 1996. Coal and deodorizer residues in marine sediments - contaminants or pollutants? Environmental Toxicology and Chemistry. 15:638-642.

Chaudhry, G.R., Ed. 1994. Biological Degradation and Bioremediation of Toxic Chemicals. Dioscorides Press. Portland, OR.

Cook, P.M, D.W. Kuehl, M.K., Walker, and R.E. Peterson. 1991. Bioaccumulation and toxicity of TCDD and related compounds in aquatic ecosystems. *in* Gallo, M.S. *et al*., eds., Banbury Report 35: Biological Basis for Risk Assessment of Dioxins and Related Compounds. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY. pp. 143-167.

Corbett, K.T. 1997. Draining the metropolis: The politics of sewers in nineteenth century St. Louis. *in* Common Fields: An environmental history of St. Louis. A. Hurley (ed.). Missouri Historical Society Press, St. Louis, MO.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service. FWS/OBS-79/31.

Custer, T.W., C.M. Custer, K. Dickerson, K. Allen, M.J. Melancon, and L.J. Schmidt. 2001. Polycyclic aromatic hydrocarbons, aliphatic hydrocarbons, trace elements, and monooxygenase activity in birds nesting on the North Platte River, Casper, Wyoming, USA. Environmental Toxicology and Chemistry 20:6324-31.

Custer, T.W., R.K. Hines, M.J. Melancon, D.J. Hoffman, J.K. Wickliffe, J. W. Bickham, J.W. Martin, and D. S. Henshel. 1997. Contaminant concentrations and biomarker response in great blue heron eggs from 10 colonies on the Upper Mississippi River, USA. Environmental Toxicology and Chemistry 16:260-271.

Desmond, W.P. 2002. Draft Final Phase I Ecological Risk Assessment. Desert Chemical Depot; Tooele Chemical Agent Disposal Facility (TOCDF); EPA I.D. No. UT 5210090002.

Donald, D.B., N.P. Gurprasad, L. Quinnett-Abbott, K.Cash. 2001. Diffuse Geographic Distribution of Herbicides in Northern Prairie Wetlands. Environmental Toxicology and Chemistry 20:273-279.

Dragun, J. 1998. The Soil Chemistry of Hazardous Materials. 2nd Edition. Amherst Scientific Publishers, Amherst, MA.

Dwyer, F. J., D.K. Hardesty, C.G. Ingersoll, J.L. Junz, and D.W. Whites, 2000. Assessing Contaminant Sensitivity of American Shad, Atlantic Sturgeon and Shortnose Sturgeon. US Geological Survey. http://www.cerc.usgs.gov/pubs/center/pdfDocs/91008.pdf

Ecology and Environment, Inc. 1988. Expanded Site Investigation dead Creek Project Sites at Cahokia/Sauget, Illinois. Final report Volume 2 of 2. May 1988.

Ecology and Environment, Inc. 1997. Preliminary Ecological Risk Assessment for Sauget Area 2, Site Q. SDMS Document ID # 141578. August 1997.

Ecology and Environment, Inc. 1998. Volume 2 Sauget Area 2 Data Tables/Maps. February 1998.

Edmisten-Watkin, G. and M.E. Stelljes, 1993. A Proposed Approach to Quantitatively Assess Potential Receptors from Chemical Exposure. *in* J.W. Gorsuch, F.J. Dwyer, C.G. Ingersoll, and T.W. La Point (*eds.*) Environmental Toxicology and Risk Assessment: 2nd Volume, ASTM STP 1173. American Society for Testing and Materials, Philadelphia, PA.

Edwards, N.T. 1986. Uptake, translocation, and metabolism of anthracene in bush bean (*Phaseolus vulgaris*). Environmental Toxicology and Chemistry 5:659-665.

Efroymson, R. A., M.E. Will, G. W. Suter II, A.C. Wooten. 1997a. Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Terrestrial Plants: 1997 Revision. ES/ER/TH-85/R3.

Efroymson, R. A., M.E. Will, G. W. Suter II. 1997b. Toxicological Benchmarks for Contaminants of Potential Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process: 1997 Revision. ES/ER/TM-126/R2.

Eisler, R. 2000. Handbook of Chemical Risk Assessment. Health Hazards to Humans, Plants, and Animals. Volumes 1-3. Lewis Publishers, Boca Raton, FL.

Elliot, J.E., L.K. Wilson, C.J. Henny, S. F. Trudeau, F.A. Leighton, S.W. Kennedy, K.M. Cheng. 2001. Assessment of Biological Effects of Chlorinated Hydrocarbons in Osprey Chicks. Environmental Toxicology and Chemistry 20:866-879.

Elliott, J.E., *et al*., 1996. Biological effects of polychlorinated dibenzo-p-dioxins, dibenzofurans, and biphenyls in bald eagle (*Haliaeetus leucocephalus*) chicks. Environmental Toxicology and Chemistry 15:782-793.

EXTOXNET. 1993a. Dinoseb. http://pmep.cce.cornell.edu/profiles/extoxnet.

EXTOXNET. 1993b. MCPA. http://pmep.cce.cornell.edu/profiles/extoxnet.

EXTOXNET. 1993c. MCPP. http://pmep.cce.cornell.edu/profiles/extoxnet.

Farrell, P. A., C.J. Kennedy, A. Wood, B. D. Johnston, and W. R. Bennett, 1998. Acute Toxicity of a Didecyldimethylammonium chloride-based Wood Preservative, Bardac 2280, to Aquatic Species. Environmental Toxicology and Chemistry 17(8): 1152-1557.

Freitag, D.L., H. Geyer-Ballhorn, and F. Korte. 1985. Environmental hazard profile of organic chemicals: An experimental method for the assessment of the behavior of organic chemicals in the ecosphere by means of laboratory tests with 14C-labelled chemicals. Chemosphere 14:1589-1616.

Fremling, C.R., J.L. Rasmussen, R.E. Sparks, S.P.Cobb, C.F. Bryan, and T.O. Claflin. 1989. Mississippi River fisheries: A case history. *in* Proceedings of the International Large River Symposium. D.P. Dodge (*ed*.). Canadian Special Publication of Fisheries and Aquatic Sciences. Ottawa, Ontario.

Friday, G.P. 1998. Ecological Screening Values for Surface Water, Sediment, and Soil. Westinghouse Savannah River Company, Savannah River Technology Center, WSRC-TR-98-00110. Aiken, South Carolina.

Gilbert, R.O. 1987. Statistical Methods for Environmental Pollution Monitoring. Van Nostrand Reinhold, New York.

Goolsby, D.A. and W.E. Pereira. 1995. Herbicides in the Mississippi River. *in* Contaminants in the Mississippi River, 1987-92. R.H. Meade (*ed*.). U.S. Geological Survey Circular 1133, Denver, Colorado.

Graf, W. and W. Novak. 1968. Arch. Hyg. Bakt 150:513-528.

Great Lakes Information Network (GLIN). 2002. www.great-lakes.net/lakes/erie.html.

Hamelink, J.L., P.F. Landrum, H.L. Bergman, and W.H. Benson. 1994. Bioavailability: Physical, Chemical, and Biological Interactions. CRC Press, Boca Raton, FL.

Hammer, E., D. Krowas, A. Schäfer, M. Specht, W. Francke, and F Schauer. 1998. Isolation and Characterization of a Dibenzofuran-Degrading Yeast: Identification of Oxidation and Ring Cleavage Products. Applied Environmental Microbiology 64:2215-2219.

Hellawell, J.M. 1977. Changes in Natural and managed ecosystems: detection, measurement and assessment. Proc. R. Soc. Lond. 197:31-56.

Hendriks, A. Jan, A. Heikens. 2000. The Power Of Size. 2. Rate Constants And Equilibrium Ratios For Accumulation Of Inorganic Substances Related To Species Weight. Environmental Toxicology and Chemistry. 20:1421–1437.

Hill, E. F., M. B. Camardese. 1986. Lethal Dietary Toxicities of Environmental Contaminants and Pesticides to Coturnix. U.S. Fish and Wildlife Service, Fish and Wildlife Technical Report 2.

Hill, E. F., R. G. Heath, J. W. Spann, and J.D. Williams. 1975. Lethal Dietary Toxicities of Environmental Pollutants to Birds. U.S. Fish and Wildlife Service, Special Scientific Report-Wildlife 191:1-61.

Hillegass, J.M., S. Zhang, M.M Häggblom, N. Hamill, E. Demarest, G. Buchanan, and K.R. Cooper. 2001. Development of NJ-specific soil bioaccumulation factors using *Lumbricus terrestris*. Poster presentation. SETAC National Meeting, Baltimore, MD. Nov. 2001.

Howard, P.H. 1991. Handbook of Environmental Degradation Rates. Lewis Publishers, Boca Raton, FL.

Hrudey, S.E., W. Chen, and C.G. Rousseaux. 1996. Bioavailability in Environmental Risk Assessment. Lewis Publishers, Boca Raton, FL.

Hudson R. H., R. K. Tucker, and M. A. Haegele. 1984. Handbook of Toxicity of Pesticides to Wildlife. U.S. Fish and Wildlife Service, Resource Publication 153.

Hull, R.N. and G.W. Suter II. 1994. Toxicological benchmarks for screening contaminants of potential concern for effects on sediment-associated biota, 1994 revision. Oak Ridge National Laboratory Report No. ES/ER/TM-95/R1, Oak Ridge, TN.

Illinois EPA (IEPA). 2003. Derived Water Quality Criteria, Updated April 2003. From IL EPA website at http://www.epa.state.il.us/water/water-quality-standards/water-quality-criteria.html.

IEPA. 1997a. Letter to Mr. David Webb from Paul E. Takacs, re: Results of an IEPA sampling event in March 1995 at Sauget Site S. SDMS Document ID # 158802. February 1997.

IEPA. 1997b. Letter to Ms. Leslie Kirby/USEPA from Paul E. Takacs, re: Clayton Chemical disposal/Bud Haney testimony with attachments. SDMS Document ID # 164342. October 1997.

Ingersoll, G.G., T. Dillon, and G.R. Biddinger. 1997. Ecological Risk Assessment of Contaminated Sediments. SETAC Press, Pensacola, FL.

Irwin, R.J., M. van Mouwerik, L. Stevens, M.D. Sees, and W. Basham. 1997. Environmental Contaminants Encyclopedia. National Park Services, Water Resources Division.

Jaagumagi, R. 1992. Development of the Ontario Provincial Sediment Quality Guidelines for arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, and zinc. Ontario Ministry of the Environment and Energy, Water Resources Branch.

Jaagumagi, R. 1994. Development of the Ontario Provincial Sediment Quality Guidelines for Polycyclic Aromatic Hydrocarbons (PAH). Ontario Ministry of the Environment and Energy, Water Resources Branch.

Jacobs, I.W., S. Chou, and J.M. Tiedje. 1975. Fate of polybrominated biphenyls (PBBs) in soils. Persistence and plant uptake. Journal of Agricultural Food Chemistry. 24:1198.

Jager, T. 1998. Mechanistic Approach for Estimating Bioconcentration of Organic Chemicals in Earthworms (Oligochaeta). Environmental Toxicology and Chemistry 17:2080-2090.

Jager, T., F.A. A. Sánchez, B Muijs, *E.G.,* van der Velde, and L. Posthuma. 2000. Toxicokinetics of polycyclic aromatic hydrocarbons in *Eisenia andrei* (Oligochaeata) using spiked soil. Environmental Toxicology and Chemistry 19:953-961.

Jarvinen, A.W. and G.T. Ankley. 1999. Linkage of Effects to Tissue Residues: Development of a Comprehensive Database for Aquatic Organisms Exposed to Inorganic and Organic Chemicals, SETAC Press, Pensacola, FL.

Johannesen, H. and J. Aamand. 2003. Mineralization of Aged Atrazine, Terbuthylazine, 2,4-D, and Mecoprop in Soil and Aquifer Sediment. Environmental Toxicology and Chemistry 22: 722-729.

Johnson, D. A. Sensitivity of Lake Sturgeon (*Acipenser fulvescens*) to the Lampricide 3-Trifluoromethyl-4-nitrophenol (TFM) in Field and Laboratory Exposures. Great Lakes Fishery Commission. http://www.glfc.or/pubs/techrecords/TR62/pdf.

Jones, D. S., Suter, G. W., and Hull, R. N. 1997. Toxicological benchmarks for screening contaminants of potential concern for effects on sediment-associated biota: 1997 Revision. Oak Ridge National Laboratory, ES/ER/TM-95/R4, November 1997.

Jones, K.C. 1991. Contamination trends in soils and crops. Environmental Pollution 69:311-326.

Jorgensen, L.A., S.E. Jorgensen, and S.N. Nielsen. 2000. ECOTOX – Ecological Modeling and Ecotoxicology Database.

Kabata-Pendias, A., 2001. Trace Elements in Soils and Plants. Third Edition. CRC Press, Boca Raton, FL. 413 pp.

Keenan, R.E., P.D. Anderson, W.R. Alsop, and J.H. Samuelian. 1999. Risk-based Management Principles for Evaluating Sediment Management Options. Paper prepared for the Sediment Management Work Group. http://www.smwg.org/products/.

Krauss, M., W. Wilcke, and W. Zech. 2000. Availability of PAHs and PCBs to Earthworms in Urban Soils, *Environmental Science and Technology* 34:4335-4340.

Long, E.R., D.D. MacDonald, S.L. Smith, and F.D. Calder, 1995. Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuarine sediments. *Env. Manage*. 19:81-97.

Long, E.R. and L.G. Morgan. 1990. The potential for biological effects of sediment-sorbed contaminants tested in the national status and trends program. National Oceanic and Atmospheric Administration (NOAA) Technical Memorandum NOS OMA 52.

Lu, P.Y. and R.I. Metcalf. 1975. Environmental fate and biodegradability of benzene derivatives as studied in model aquatic ecosystem. Environmental Health Perspectives 10:269-284.

MacDonald, D. D., Ingersoll, C. G., Berger, T. A. 2000. Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Arch. Environ. Contam. Toxicol. 39:20-31.

Mackay, D., W.Y. Shiu, and K.C. Ma, 1992. Illustrated Handbook of Physical-Chemical Properties and Environmental Fate for Organic Chemicals. Volume 1. Lewis Publishers, Boca Raton, FL. 697pp.

Mai, P., O.S. Jacobsen, and J. Aamand. 2001. Mineralization and co-metabolic degradation of phenoxyalkanoic acid herbicides by a pure bacterial culture isolated from an aquifer. Applied Microbiology and Biotechnology 56(3-4).

Malins, D.C. *et al.* 1988. Neoplastic and other diseases in fish in relation to toxic chemicals: an overview. Aquatic Toxicology 11:43-67.

Markwell, R.D., D.W. Connell, and A.J. Gabric. 1989. Bioaccumulation of lipophilic compounds from sediment by oligochaetes. Water Resources 23:1443-1450.

McElroy, A.E., J.W. Farrington, and J.M. Teal. 1989. Bioavailability of polycyclic aromatic hydrocarbons in the aquatic environment. In: U. Varanasi (*ed*.). Metabolism of Polycyclic Aromatic Hydrocarbons in the Aquatic Environment. CRC Press, Boca Raton, FL, pp.1-39.

McKim, J.M and J.W. Nichols 1994. Aquatic Toxicology: Molecular, Biochemical, and Cellular Perspectives. Ostrander and Mellins, ed. CRC Press, Boca Raton, FL. (*in*) Hamelink, J.L., P.F. Landrum, H.L. Bergman, and W.H. Benson (*eds.*) Bioavailability: Physical, Chemical, and Biological Interactions. CRC Press, Boca Raton, FL.

Meador, J.P., E. Casillas, C.A. Sloan, and U. Varanasi. 1995a. Comparative bioaccumulation of polycyclic aromatic hydrocarbons from sediment by two infaunal invertebrates. Mar. Ecol. Prog. Ser. 123:107-124.

Meador, J.P., J.E. Stein, W.L. Reichert, and U. Varanasi. 1995. Bioaccumulation of polycyclic aromatic hydrocarbons by marine organisms. Rev. Environ. Contam. Toxicol. 143:79-165.

Menzie, C., Cura, J., J. Freshman, and S. Svirsky. 1993. Evaluating ecological risks and developing remedial objectives at forested wetland systems in New England. Workshop On Ecological Risk Assessment to Hazardous Waste Site Remediation. Water Environment Federation.

Menzie-Cura. 1999. Ecological Risk Assessment Work Plan for Sauget Area 1, Sauget, St. Clair County, Illinois. Menzie-Cura & Associates, Chelmsford, MA.

Menzie-Cura. 2001. Ecological Risk Assessment for WG Krummrich Plant, Sauget, St. Clair County, IL. June 2001, Internal Draft Review. Prepared for Solutia, Inc., St. Louis, MO.

Metcalf, R.L. 1974. A laboratory model ecosystem to evaluate compounds producing biological magnification. In Hayes, E.J., (*ed*.) Essays in Toxicology, Volume 5. Academic Press. pp. 17-38.

Miglioranza, K.S.B., J.E Aizpún de Moreno, and V.J. Moreno. 2003. Dynamics of Organochlorine Pesticides in Soils from a Southeastern Region of Argentina. Environmental Toxicology and Chemistry 22:712-717.

Missouri Department of Conservation (MDOC). 2007. "Pallid Sturgeon (Scaphirhynchus albus)." Best Management Practices. 29 May 2007b http://www.mdc.mo.gov/documents/nathis/endangered/p_sturgeon.pdf
.

Missouri Department of Natural Resources. 1994. Basin 48: Mississippi River and central tributaries. State of Missouri water quality basin plan, Missouri Department of Natural Resources.

Montana Fish, Wildlife and Parks (MFWP). 1997. "Pallid Sturgeon." Montana's Fish Species of Special Concern. Downloaded April 2007. http://www.fisheries.org/units/AFSmontana/SSCpages/Pallid%20status.htm.

MFWP. 2008. Montana Field Guides: Pallid Sturgeon – *Scaphirhynchus albus*. Downloaded April 2008. http://fieldguide.mt.gov/detail_AFCAA02010.aspx.

Nagy, K.A. 1987. Field Metabolic Rates and Food Requirement Scaling in Mammals and Birds. Ecological Monographs, 57:111-128.

National Institute of Health (NIH). 2002. http://toxnet.nlm.nih.gov.

National Institute for Occupational Safety and Health (NIOSH). 2002. The Registry of Toxic Effects of Chemical Substances. www.cdc.gov/niosh/rtecs.html.

National Oceanographic and Atmospheric Administration (NOAA). 1988. Pacific Coast Analysis of Elements in Sediments and Tissues, 1984-1988. Technical Memo 16. www.nwfsc.noaa.gov/pubs/tm/tm16.

NOAA. 1999. Screening Quick Reference Tables (SQRTs).

National Research Council (NRC). 1980. Mineral Tolerance of Domestic Animals. National Academy of Sciences, Washington DC.

National Toxicology Program (NTP). 2003. http://ntp-server.niehs.nih.gov/.

Neff, J.M.. 1979. Polycyclic Aromatic Hydrocarbons in the Aquatic Environment: Sources, Fates and Biological Effects. London: Applied Science.

Newman, M.C. 2001. Fundamentals of Ecotoxicology. Lewis Publishers, Boca Raton, FL.

Niering, W.A. and N.C. Olmstead. 1979. National Audubon Society Field Guide to North American Wildflowers. Alfred A. Knopf, New York.

NIOSH. 2002. International Chemical Safety Cards. www.cdc.gov/niosh/ipcsneng.

Nosek, J.A., S.R. Craven, J.R. Sullivan, S.S. Hurley, and R.E. Peterson. 1992. Toxicity and Reproductive Effects of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin in Ring-necked Pheasant Hens. Journal of Toxicology and Environmental Health. 35: 187-198.

Oliver, B.G. and A. J. Niimi. 1983. Bioconcentration of chlorobenzenes from water by rainbow trout: correlations with partition coefficients and environmental residues. Environmental Science and Technology 17:287-291.

Oliver, B.G. 1984. Uptake of chlorinated organics for anthropogenically contaminated sediments by oligochaete worms. *Can. J. Fish. Aquat. Sci.* 41:878-883.

Oliver, B.G. 1987. Bio-uptake of chlorinated hydrocarbons from laboratory-spiked and field sediment by oligochaete worms. Environmental Science and Technology 21:785-790.

Paine, M.D., P.M. Chapman, P.J. Allard, M.H. Murdoch, and D. Minifie. 1996. Limited bioavailability of sediment PAH near an aluminum smelter: contamination does not equal effects. Environmental Toxicology and Chemistry 15:2003-2018.

Paterson, S., D. Mackay, D. Tam and W.Y. Shiu. 1990. Uptake of organic chemicals by plants: A review of processes, correlations, and models. Chemosphere 21:297-331.

Paustenbach, D.J. 1987. Assessing the Potential Environment and Human Health Risk of Contaminated Soil. USEPA Workshop on the Assessment of Health Risks of Contaminated Soils.

Pementel, D., 1995. Amounts of pesticides reaching target pests: environmental impacts and ethics. Journal of Agricultural and Environmental Ethics 8:17-29.

Pendias, A. and H. Pendias. 1992. Trace Elements in Soils and Plants, 2nd edition. CRC Press, Boca Raton, FL.

Persaud, D., R. Jaagumagi, and A. Hayton. 1993. Guidelines for the protection and management of aquatic sediment quality in Ontario. Ontario Ministry of the Environment Report

PIBS 1962, Toronto.

Peterson, S., D. Mackay, and C. McFarlane. 1994. A model of organic chemical uptake by plants from soil and the atmosphere. Environmental Science & Technology, 28:2259-2266.

Platts, W.S., Megahan, W.F., and Minshall, G.W. 1983. Methods for evaluating stream, riparian, and biotic conditions. U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station, Ogden, Utah 84401. General Technical Report INT-138.

Polder, M.D, E.M. Hulzebos, and D.T. Jager. 1995. Validation of models on uptake of organic chemicals by plant roots. Environmental Toxicology and Chemistry 14:1615-1623.

Risk Assessment Information System (RAIS). 2003. Oak Ridge National Laboratory, Oak Ridge, TN. http://risk.lsd.ornl.gov/

Reichert, W.L., B. Le Eberhart, and U. Varanasi. 1985. Exposure of two species of deposit-feeding amphipods to sediment-associated [3H]benzo[a]pyrene: uptake, metabolism and covalent binding to tissue macromolecules. Aquatic Toxicology 6:45-56.

Salisbury, F.B. and C.W. Ross. 1992. Plant Physiology. Wadsworth Publishing Company, Belmont, CA.

Sample, B.E. and G.W. Suter. 1994. Estimating Exposure of Terrestrial Wildlife to Contaminants.

Sample, B.E., D.M. Opresko, G.W. Suter II. 1996. Toxicological Benchmarks for Wildlife: 1996 Revision. ES/ER/TM-86/R3.

Sample, B.E., J.J. Beauchamp, R.A. Efroymson, G.W. Suter. 1998. Development and Validation of Bioaccumulation Models for Small Mammals. ES/ER/TM-219.

Sauget Area 2 Sites Group (SA2SG). 2001. Surface Water, Sediment, and Aquatic Biota Sampling Project Plans, Sauget Area 2 Sites, Sauget, IL, Volume 3, Rev. 1. Submitted by Sauget Area 2 Sites Group to USEPA, May 2001. USEPA Docket No: R8H-5-00-003.

Shen, J., Q. Zhang, S. Ding, S. Zhang, and J.R. Coats. Bioconcentration and Elimination of Avermection B1 in Sturgeon. Environmental Toxicology and Chemistry 24 (2): 395-299.

Scheuhammer, AM; AHK Wong, D. Bond. 1998. Mercury and Selenium Accumulation in Common Loons (*Gavia immer*) and Common Mergansers (*Mergus merganser*) from Eastern Canada. Environmental Toxicology and Chemistry 17:197-201.

Schimmel, S.C., J.M. Patrick, Jr. and J. Forester. 1976. Heptachlor: Uptake, deputation, retention, and metabolism by spot (*Leiostomus xanthurus*). Journal of Toxicology and Environmental Health 2: 169-178.

Schramm, K.W., A. Reischl, and O. Hutzinger. 1987. UNITTree - A multimedia compartment model to estimate the fate of lipophilic compounds in plants. *Chemosphere*, 16: 2653-2663.

Shmal'gauzen, O.I., 1971. Influence of Phenol Ion to Prelarval Development of Sturgeons. I. External Structure and Behavior. Ontogenez 2(6): 603-610.

Smith, S. L., MacDonald, D. D., Keenleyside, K. A., Ingersoll, C. G., Field, J. 1996. A preliminary evaluation of sediment quality assessment for freshwater ecosystems. J. Great Lakes Res. 22:624-638.

Soltani, M., H. Khoshbavar-Rostami, A. Mokarami, 2006. Toxicity, Hematological Changes and Chemiluminescence Response of Persian Sturgeon *Acipenser persicus* Following Exposure to Polyaromatic Hydrocarbons (PAHs). Proceedings of the World Aquaculture Society, 2006.

Sousa, J.P., S. Loureiro, S. Pieper, M. Frost, W. Kratz, A.J.A. Nogueira, and A.M.V.M. Soares. 2000. Soil and Plant Diet Exposure Routes and Toxicokinetics of Lindane in a Terrestrial Isopod. Environmental Toxicology and Chemistry 19:2557-2563.

Spectrum Laboratories. 2003a. Chemical Fact Sheet for bis (2-chloroethoxy) methane. http://speclab.com/compound/c111911.htm.

Spectrum Laboratories. 2003b. Chemical Fact Sheet for Dibenzofuran. http://www.speclab.com/compound/C132649.htm.

Spectrum Laboratories. 2003c. Chemical Fact Sheet for Dinoseb. http://www.speclab.com/compound/C88857.htm.

Spectrum Laboratories. 2003d. Chemical Fact Sheet for MCPA. http://www.speclab.com/compound/C94746.htm.

Suedel, B.C., J.A. Boraczek, R.K. Peddicord, P.A. Clifford, and T.M. Dillon. 1994. Trophic transfer and biomagnification potential of contaminants in aquatic systems. Rev. Environ. Contam. Toxicol. 136:21-89.

Suffet, I.H. 1977. Fate of Pollutants in the Air and Water Environments – Part 2: Chemical and Biological Fate of Pollutants in the Environment. Volume 8. John Wiley & Sons, Inc., New York.

Suter, G.W. 1993. Ecological Risk Assessment. Lewis Publishers, Boca Raton, FL.

Suter, G. W. 1996. Toxicological benchmarks for screening contaminants of potential concern for effects on freshwater biota. Environ. Toxicol. Chem. 15(7), 1232-1241.

Suter, G.W and C.L. Tsao. 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ES/ER/TM-96/R2.

Suter, G.W., R.A. Efroymson, B.E. Sample, D.S., Jones, 2000. Ecological Risk Assessment for Contaminated Sites. Lewis Publishers, Boca Raton, FL.

Swartz, R.C., P.F. Kemp, D.W. Schults, and J.O. Lamberson. 1988. Effects of mixtures of sediment contaminants on the marine infaunal amphipod *Rhepoxinius abronius*. Environmental Toxicology and Chemistry 7**:**1013-1020.

Teh, Swee Joo, C. Wong, V. Furtula, and FC The, 2003. Lethal and Sublethal Toxicity of Didecyldimethylammonium Chloride in Early Life States of White Sturgeon, *Acipenser transmontanus*". Environmental Toxicology and Chemistry. 22(9): 2152-2158.

Thomann, R.V., J.P. Connolly, and T.F. Parkerton. 1992. An equilibrium model of organic chemical accumulation in aquatic food webs with sediment interaction. Environmental Toxicology and Chemistry 11:615-629.

Thomann, R. V., J.D. Mahony, and R. Mueller. 1995. Steady-state model of biota sediment accumulation factor for metals in two marine bivalves. Environmental Toxicology and Chemistry 14:1989-1998.

Torres, K.C. and M.L. Johnson. 2001. Bioaccumulation of metals in plants, arthropods, and mice at a seasonal wetland. Environmental Toxicology and Chemistry 20:2617-2626.

Travis, C.C. and A.D. Arms. 1988. Bioconcentration of organics in beef, milk, and vegetation. Environmental Science & Technology, 22:271-274.

United States Army Corps of Engineers (USACOE). 2002. The Environmental Residue Effects-Database, November 2002 Update. http://www.wes.army.mil/el/ered/index.html.

USACOE, 2005. Pallid Sturgeon (*Scaphirhynchus albus*). Threatened, Endangered, and Senstive Species Protection and Management System. http://el.erdc.usace.army.mil/tessp.

United States Department of Agriculture, Soil Conservation Service. 2003. Pesticide Fact Sheets. Forest Service. 2,4-D. www.infoventures.com/e-hlth/pesticides/24dp.html.

United States Environmental Protection Agency (USEPA). 1985. Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Groundwater - Parts I and II. EPA/600/6-85/002a/b.

USEPA. 1987. Processes, Coefficients, and Models for Simulating Toxic Organics and Heavy Metals in Surface Waters. EPA/600/3-87/015.

USEPA. 1988a. Drinking Water Criterion for Antimony.

USEPA. 1988b. Pesticide Fact Sheets – Mecoprop (Chipco Turf Herbicide, MCPP). http://pmep.cce.cornell.edu/profiles/herb-growthreg/fatty-alcoho…/herb-prof-mecoprop.htm.

USEPA. 1988c. Review of Ecological Risk Assessment Methods. EPA/230-10-88-041. Office of Planning and Evaluation, Washington, D.C.

USEPA. 1989a. Risk Assessment Guidance for Superfund, Volume II, Environmental Evaluation Manual, Interim Final. EPA/540/1-89/001. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, DC.

USEPA. 1989b. "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms". EPA/600/4-89/001.

USEPA. 1991a. Handbook for Remediation of Contaminated Sediments. EPA/625/6-91/028. Office of Research and Development, Washington, D.C.

USEPA. 1992a. Framework for Ecological Risk Assessment. EPA/630/R-92/001, Risk Assessment Forum, U.S. Environmental Protection Agency, Washington, D.C.

USEPA. 1992b. A Supplemental Guidance to RAGS: Calculating the Concentration Term. Publication 9285.7-081. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, DC.

USEPA. 1993. Wildlife Exposure Factors Handbook. EPA/600/R-93/187.

USEPA. 1994. Using Toxicity Tests in Ecological Risk Assessment. ECO Update, Volume 2(1), March 1994. Publication 9345.0-051, OSWER, USEPA.

USEPA. 1996. Calculation and evaluation of sediment effect concentrations for the Amphipod *Hyalella azeteca* and the Midge *Chironomous riparius*, EPA 905-R96-008, Great Lakes National Program Office, Chicago, IL.

USEPA. 1997a. Ecological Risk Assessment Guidance for Superfund. Interim Final. EPA 540-R-97-006.

USEPA. 1997b. Preliminary Ecological Risk Assessment for Sauget Area 2, Site Q, Sauget, St. Clair County, Illinois. Ecology and Environment, Chicago, IL.

USEPA. 1997c. Screening values for chemicals evaluated (Appendix D): The incidence and severity of sediment contamination in surface waters of the US. Volume 1 – National Sediment Quality Survey. EPA 823-R-97-006.

USEPA, 1998a. Guidelines for Ecological Risk Assessment. EPA/630/R-95/002F.

USEPA. 1998b. The Incidence and Severity of Sediment Contamination in Surface Waters of the United States. Volume 1: National Sediment Quality Survey. USEPA OST. EPA 823-R97-006.

USEPA. 1999a. Protocol for Screening Level Ecological Risk Assessment at Hazardous Waste Combustion Facilities, Vol. 1, 2, & 3. Peer Review Draft. August 1999. EPA530-D-99-001A, EPA530-D-99-001B, and EPA530-D-99-001C. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response.

USEPA, 1999b. Data Collection for the Hazardous Waste Identification Rule. Section 10.0 Farm Food Chain and Terrestrial Foodweb Data. Prepared by Center for Environmental Analysis. Research Triangle Institute under Contract No. 68-W-98-085.

USEPA. 1999c. Issuance of Final Guidance: Ecological Risk Assessment and Risk Management for Superfund Sites. OSWER Directive 9285.7-28P.

USEPA. 2000a. USEPA Ecological Soil Screening Levels (Eco-SSLs).

USEPA. 2000b. Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates. EPA/600/R-99/064.

USEPA. 2000c. Administrative Order By Consent (Order Requiring RI/FS). November, 2000.

USEPA. 2001. Region IV Recommended Ecological Screening Values for Soil. WSRC-TR-98-00110.

USEPA. 2002a. National Recommended Water Quality Criteria: 2002. EPA-822-R-02-047, Office of Water, OST, USEPA, Washington, DC.

USEPA. 2002b. Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December 2002. Office of Emergence and Remedial Response, U.S. Environmental Protection Agency, Washington, DC.

USEPA. 2002c. Record of Decision (ROD) for the Groundwater Operable unit (OU-2), Sauget Area 2 Superfund Site, Sauget, Illinois. September 2002.

USEPA. 2003a. Integrated Risk Information System (IRIS). www.epa.gov/iris.

USEPA. 2003b. Draft Ecological Soil Screening Level for Cobalt - Interim Final.

United States Fish and Wildlife Service (USFWS). 1993. Pallid Sturgeon Recovery Plan. USFWS, Bismarck, North Dakota. 55pp.

USFWS. 1998. "Pallid Sturgeon (Scaphirhynchus albus)." Downloaded 25 Apr 2007 http://www.fws.gov/midwest/Fisheries/library/broch_pallidsturg.pdf .

USFWS. 2007. Endangered Species: Pallid Sturgeon (*Scaphirhynchus albus*)." Ecological Services. 25 Apr 2007. http://www.fws.gov/midwest/Endangered/fishes/palld_fc.html .

United States Geological Survey (USGS). 1999. Ecological Status and Trends of the Upper River Mississippi River System 1998: A Report of the Long Term Resource Monitoring Program. U.S. Geological Survey, Upper Midwest Environmental Sciences Center, La Crosse, WI.

USGS. 2006. Toxicity of Sodium Bicarbonate to Fish from Coal-Bed Natural Gas Production in the Tongue and Powder River Drainages, Montana and Wyoming. Fact Sheet 2006-3092.

USGS, 2005. Sensitivity of Shovelnose Sturgeon (*Scaphirynchus platyrynchus*) toward TCD or a Chlordane Mixture: Early Life Stage Development and Survival. Proceedings from Scaphirynchus Conference, St. Louis MO. January 11-33, 2005.

URS Corporation (URS). 2002a. RI/FS Support Sampling Plan (SSP). for Sauget Area 2, Sauget, IL. Prepared by URS Corporation, St. Louis, IL and prepared for Sauget Area 2 Sites Group in April 2002.

URS. 2002b. RI/FS Support Sampling Plan Vol. 2A, Waste, Soil, Stormwater, Groundwater and Air Field Sampling Plan. Prepared by URS Corporation, St. Louis, IL and prepared for Sauget Area 2 Sites Group in June 2002.

URS. 2002c. Field Sampling Plan, Sauget Area 2 Support Sampling Project, Sauget, Illinois, Volume 2A. Prepared by URS Corporation, St. Louis, IL and prepared for Sauget Area 2 Sites Group in April 2002.

URS. 2003a. Field Sampling Report. for Sauget Area 2, Sauget, IL. Prepared by URS Corporation, St. Louis, IL and prepared for Sauget Area 2 Sites Group.

URS. 2003b. Data Validation Report for Sauget Area 2, Sauget, IL. Prepared by URS Corporation, St. Louis, IL and prepared for Sauget Area 2 Sites Group.

URS. 2004. Draft Remedial Investigation/Feasibility Study Report. Prepared by URS Corporation, St. Louis, IL and prepared for Sauget Area 2 Sites Group in January 2004.

URS. 2007. Data Validation Report for Sauget Area 2, Sauget, IL. Prepared by URS Corporation, St. Louis, IL and prepared for Sauget Area 2 Sites Group.

Van den Berg, M., L. Birnbaum, A.T.C. Bosveld, B. Brunstrom, P. Cook, M. Feeley, J.P. Giesy, A. Hanberg, R. Hasegawa, S.W. Kennedy, T. Kubiak, J.C. Larsen, F.X. R. van Leeuwen, A.K.D. Liem, C. Nolt, R. E. Peterson, L. Poellinger, S. Safe, D Schrenk, D. Tillitt, M. Tysklind, M. Younes, F. Waern, and T. Zacharewski. 1998. Toxic Equivalency Factors (TEFs) for PCBs, PCDDs, PCDFs for humans and wildlife. Environmental Health Perspectives, 106:775-792.

van Hoof, P.L., J.V.K. Kukkonen, and P.F. Landrum. 2001. Impact of sediment manipulation on the bioaccumulation of polycyclic aromatic hydrocarbons from field-contaminated and laboratory-dosed sediments by an Oligochaete. Environmental Toxicology and Chemistry 20:1752-1761.

Varanasi, U., J.E. Stein and M. Nishimoto, 1989. Biotransformation and disposition of polycyclic aromatic hydrocarbons (PAH) in fish. (*in*) U. Varanasi (*ed*.). Metabolism of Polycyclic Aromatic Hydrocarbons in the Aquatic Environment. CRC Press, Boca Raton, FL, pp.93-149.

Vaughn, T.A. 1986. Mammalogy. Saunders College Publishing, Philadelphia, PA.

Vermont Safety Information Resources, Inc. (SIRI). 2003. http://hazard.com/msds/index.php.

Vink, J.P.M and S.E.A.T.M. van der Zee. 1997. Effect of Oxygen Status on Pesticide Transformation and Sorption in Undisturbed Soil and Lake Sediment. Environmental Toxicology and Chemistry 16:608-616.

Washington State Department of Ecology. 2001. Terrestrial Ecological Evaluations. www.ecy.wa.gov/programs/tcp/policies/terrestrial/table_749-5.htm.

Washington State Department of Ecology (DEP). 2003. Sediment Quality Chemical Criteria: No Effects Level and Minor Adverse Effects Level. WAC 172-204-320 and WAC 173-204-420.

Wild, S.R. and K.C. Jones. 1992. Organic chemicals in the environmental: Polynuclear aromatic hydrocarbon uptake by carrots grown in sludge-amended soil. Journal of Environmental Quality 21:217-225.

Woodford, J.E., W.H. Krasov, M.E. Meyer, L. Chambers. 1998. Impact of 2,3,7,8-TCDD exposure on survival, growth, and behaviour of osprey breeding in Wisconsin, USA. Environmental Toxicology and Chemistry 17: 1323-1331.

World Health Organization (WHO). 1996. Thallium And Thallium Compounds Health And Safety Guide No. 102. IPCS International Programme on Chemical Safety. www.inchem.org/documents/hsg/hsg102.htm.

Young, A.L. 1983. Long-Term Studies on the Persistence and Movement of TCDD in a Natural Ecosystem. Human and Environmental Risks of Chlorinated Dioxins and Related Compounds. R.E. Tucker, A.L. Young, and A. P. Gray, ed. Plenum Press, NY.

Zeiger, E. 1998. Bis (2-chloroethoxy) methane: Review of Toxicological Literature. Prepared by National Institute of Environmental Health Sciences, National Toxicology Program. http://ntp-server.niehs.nih.gov/htdocs/Chem_Background/ExecSumm/bis(2-chloroethoxy)methane.html.

Zipper, C., Bunk, M., A. J.B., Zehnder, and H-P.E. Kohler. 1998. Enantioselective Uptake and Degradation of the Chiral Herbicide Dichlorprop [(RS)-2(2,4-Dichlorphenoxy) propanoic acid] by *Sphingomonas herbicidovorans* MH. Journal of Bacteriology 180:3368-3374.

Appendix I-A

Ecological Risk Assessment Work Plan

12.0 ECOLOGICAL RISK ASSESSMENT WORK PLAN

This section outlines the approaches and methodologies to be used in the preparation of the ecological risk assessment (ERA) for the Sauget Area 2 Sites (the Sites) located in the Villages of Sauget and Cahokia, Illinois. Environmental concerns at the Sites are being addressed subject to an Administrative Order by Consent between the Sauget Area 2 Sites Group (the Group) and the U. S. Environmental Protection Agency (USEPA) Region V, pursuant to Section 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The Sites include five identified source areas (Sites O, P, Q, R, and S). Additionally, the Sites front approximately 8,000 linear feet of the Mississippi River.

This work plan was developed based on the following guidance material:

Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments (EPA 540-R-97-006, June 1997);
Guidelines for Ecological Risk Assessment (EPA/630/R-95/002F, April 1998);
Framework for Ecological Risk Assessment (EPA630/R-92/001);
Developing a Work Scope for Ecological Assessments (Eco Update, Volume 1, Number 4, May 1992);
U.S. EPA Region V Ecological Assessment Guidance;
Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA (EPA 540 G-80 004, October 1988); and
Issuance of Final Guidance: Ecological Risk Assessment and Risk Management Principles for Superfund Sites (OSWER Directive 9285.7-28 P).

12.1 Scope and Objectives

The objective of the ERA is to evaluate the potential for adverse ecological effects to occur as a result of exposure to Site-related constituents by biological receptors living within the aquatic and terrestrial ecosystems located on or adjacent to the Sites. The ERA will be a baseline evaluation of ecological risks utilizing both historic data regarding the Sites and data to be collected as part of future planned investigative activities within the Mississippi River and the five Sites. The ERA will be prepared using conservative, but realistic, assumptions about

potential exposures and, since it is a baseline assessment, will assume no remedial action has occurred.

Specifically, the principal functions of the ERA described in this work plan are:

Determine whether actual or potential ecological risks currently exist at the Sites;
Identify those constituents present at the Sites that pose potential ecological risks; and
Generate data and information for risk management and risk reduction decisions.

This work plan outlines the procedures by which data collected from aquatic and terrestrial sections of the Sites will be evaluated to assess the potential for adverse ecological effects. This ERA will evaluate current site data that will be collected through the following planned activities:

1. *Aquatic Systems*

Chemical analyses of sediment samples collected from the Mississippi River and on-Site ponds;
Community evaluation (species richness and total biomass) of benthic macroinvertebrates collected from the Mississippi River and on-Site ponds (should they be present);
Bioassay analyses of toxicity tests conducted on sediment collected from the Mississippi River and on-Site ponds;
Bioaccumulation studies on sediment samples collected from the Mississippi River and on-Site ponds;
Chemical analyses of surface water samples collected from the Mississippi River and on-Site ponds;
Bioassay analyses of toxicity tests conducted on surface water collected from the Mississippi River and on-Site ponds;
Chemical analyses of fish tissue collected from the Mississippi River and on-Site ponds; and

2. Terrestrial Systems

Chemical analyses of collocated surface soil, plant tissue, and earthworm samples collected from the five Sites.

The specific details of how these data will be collected are presented in separate Field Sampling Plans (FSPs) and Quality Assurance Project Plans (QAPPs). Specific documents have been developed for the Mississippi River (Volume 3A and 3B of the Support Sampling Plan) and terrestrial portions of the Sites adjacent to the river (Volume 4A and 4B of the Support Sampling Plan). It is the objective of this Ecological Risk Assessment work plan to describe how the data collected as per the FSPs and QAPPs will be evaluated to assess the potential for ecological risks associated with constituents of concern in the Mississippi River and the terrestrial portions of the Sites.

12.2 Work Plan Organization

This work plan is divided into the following sections:

Ecological Risk Assessment Process;
Ecological Setting;
Selection of Chemicals of Potential Ecological Concern (COPECs);
Identification of Receptors and Endpoints;
Ecotoxicological Benchmarks;
Wildlife Exposure Models;
Risk Characterization;
Uncertainties; and
Report Preparation

12.3 Ecological Risk Assessment Process

USEPA has developed and issued structured guidance for conducting ERAs. In 1992, USEPA presented a general framework for conducting ERAs that outlined the concepts of assessment and measurement endpoints (USEPA, 1992a). The framework document was intended to be the first step in the promulgation of a simple and flexible structure for evaluating the potential for ecological risks within the USEPA. The framework document outlined the completion of an ERA in terms of:

> Problem Formulation – This is the first phase of the ERA during which the goals, breadth, and focus of the assessment are articulated;
>
> Analysis – The analysis phase consists of the technical evaluation of data. This phase is divided into the characterization of exposure and the characterization of ecological effects; and
>
> Risk Characterization – During this phase, the likelihood of the expression of adverse effects resulting from the exposure of a receptor to a stressor is evaluated.

This framework approach was further defined in 1998 with the publishing of USEPA's general guidelines for conducting ERAs (USEPA, 1998a). USEPA (1998a) placed new emphasis on ensuring that the results of the assessment can be used to support risk management decisions.

Almost concurrent with the issuance of the 1998 guidance document, an interim final programmatic guide to the development of ERAs under CERCLA was developed by the USEPA Office of Emergency & Remedial Response (USEPA, 1997a). This guide (Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments or "ERAGs") placed the three phases of the ERA process into a more structured eight-step process for the development of ERAs specifically at CERCLA sites. This allowed for a more proactive mechanism to measure the progress and organization of the ERA. The eight steps outlined in that document (and applied to the ERA being prepared for the Sites) are:

Step 1 – Preliminary Screening Level, which includes, preliminary problem formulation, and preliminary toxicity evaluation.

Step 2 – Screening Level, which includes development of exposure estimates and preliminary risk calculations. The step includes a Scientific/Management Decision Point **(SMDPa)**.

Step 3 – Baseline Risk Assessment Problem Formulation, which includes toxicity evaluation, development of a preliminary site conceptual model and exposure pathways, and development of assessment endpoints. This step also includes a **SMDP (SMDPb)**.

Step 4 – Study Design and DQO Development. This step includes development of the Work Plan, and Sampling and Analysis Plan based upon results of the previous three steps. This step also includes an **SMDP (SMDPc)**.

Step 5 – Verification of Field Sampling Design. a site visit This step includes a determination of the feasibility of the field program as outlined in Step 4. This step includes an **SMDP (SMDPd)**.

Step 6 - Site Investigation and Data Analysis. This step includes an **SMDP**.

Step 7 – Risk Characterization. This step includes more refined and detailed quantification of potential site risks, and is generally a more realistic evaluation of risks than was performed in Step 2.

Step 8 – Risk Management, which includes selection of alternatives in the Record of Decisions as a **SMDP (SMDPe)**.

SMDPs are checkpoints in the ERA process to:

Verify that the work that was conducted at each step is complete;

Determine whether the risk assessment is proceeding in a direction that will support decision making; and

Determine the need, if any, for proceeding to the next step.

SMDPs provide the opportunity to further focus assessment approaches or add additional activities to address the specific goals of the ERA. They also provide the opportunity to exit the process where the weight-of-evidence supports no further action, since all eight steps may not be required for all site evaluations.

USEPA has also issued a set of risk management principles that are relevant to ERAs and that serve to supplement the ERA guidance (USEPA, 1999a). This directive, prepared by the Office of Solid Waste and Emergency Response (OSWER), recommends the following series of risk assessment/risk management questions be answered at each SMDP:

What ecological receptors should be protected? Site-specific assessment endpoints should be identified that address chemical-specific potential adverse effects to local populations and communities of plants and animals. The role of structure and function of the endpoint becomes important in this decision (Keenan et al., 1999). For example, the structure of the benthic community itself (i.e., its diversity) may be less important to the local system than the higher trophic level it supports (i.e., its function as a food source for higher trophic level organisms).

Is there an unacceptable ecological risk at the site? Ecological impacts can be readily apparent (e.g., loss of vegetation) or less apparent (e.g., slight change in benthic abundance). A variety of assessment and measurement endpoints may be needed to generate lines-of-evidence to determine whether a potential exists for an unacceptable ecological risk. It is also important to determine whether or not the observed “effect” is due to site-related constituents or from indigenous conditions (e.g., naturally reducing conditions causing a paucity of benthic organisms).

Remaining ecological risk assessment/risk management questions discussed in USEPA (1999a) emphasize issues related to remediation. However, they need to be kept in mind as the investigation and ecological risk assessment for the Sites are completed.

> Will the cleanup cause more ecological harm than current site contamination? Short-term and long-term effects of the contamination should be considered, as well as the ability of the system to recover from any disturbance related to remediation. For example, it may be counterproductive to remove a bottomland hardwood forest based on a presumed short-term ecological impact to a small mammal when the forest cannot be restored due to issues related to water management as well as the long period of time required for system recovery.
>
> What cleanup levels are protective? If a decision is made that a remedial action is required, the various lines-of-evidence that are used to evaluate the potential risks are revisited to determine an appropriate cleanup goal. The likelihood of the response alternatives to achieve success and the time frame for an ecological community to fully recover should be considered in the remedy selection. Generally, empirical data supporting a concentration/response gradient is the most appropriate to use for this assessment.

In addition to the above decisions, the OSWER Directive identifies six principles that risk managers should address when scoping ecological risk assessments or when making ecological risk management decisions (USEPA, 1999a). The principles are:

> Principle Number 1 – Reduce ecological risks to levels that will result in the recovery and maintenance of healthy local populations and communities of biota.
>
> Principle Number 2 – Coordinate with Federal, State, and/or Tribal Natural Resource Trustees.
>
> Principle Number 3 – Use site-specific ecological risk data to support cleanup decisions. Site-specific data are used to determine whether or not site releases

present unacceptable risks and to develop quantitative cleanup levels that are protective.

Principle Number 4 – Characterize site risks in terms of magnitude (i.e., the degree of observed or predicted responses of receptors to the range of contaminant levels), severity (i.e., how many and to what extent the receptors may be affected), distribution (i.e., aerial extent and duration over which effects may occur), and the potential for recovery of the affected receptors.

Principle Number 5 – Communicate risks to the public.

Principle Number 6 – Remediate unacceptable ecological risks.

One of the critical points in this memorandum is that USEPA has directed the ecological risk assessment process to examine populations, as opposed to individuals.

12.3.1 Consistency with the ERAGs Process

ERAGs (USEPA, 1997a) were used as a basis for the development of this ERA Work Plan. However, because of USEPA's desire to expedite certain aspects of the Remedial Investigation/Feasibility Study (RI/FS) process for the Sites, adjustments were made in the ERAGs process. A limited Step 1 (Screening Level Problem Formulation and Ecological Effects Evaluation) and Step 2 (Screening Level Exposure Estimate and Risk Calculation) have been conducted for a section of the Mississippi River as part of other environmental studies. A screening level assessment has been conducted for the terrestrial portion of the Sites on a qualitative basis using some historic data and assessment reports prepared by various regulatory agencies.

This Work Plan outlines the procedures to be used in the development of a Baseline Ecological Risk Assessment (BERA) for the aquatic and terrestrial communities at the Sites. This Work Plan continues the ERAGs process by detailing Step 3 (Baseline Risk Assessment Problem Formulation) in Sections 12.4 and 12.5 (identification of exposure pathways and conceptual site model), 12.6 (identification of chemicals of concern), and 12.7 (identification of assessment

endpoints). Step 4 (Study Design and DQP Process) is outlined in Section 12.7 (identification of measurement endpoints and lines of evidence), Section 8 of this SSP and Volumes 3A, 3B, 4A, and 4B (work plan and sampling and analysis plan). Step 5 (Verification of Field Sampling Design) will be made during the preliminary site reconnaissance described in Volumes 3A, 3B, 4A, and 4B. Step 6 (Site Investigation and Data Analysis) will be completed during the implementation of the various sampling plans and the completion of Step 7 (Risk Characterization) is described in Section 12.8.

Regarding the use of SMDPs, discussions held with the USEPA, U.S. Fish and Wildlife Service, Illinois Environmental Protection Agency, and the government contractor served to consolidate SMPDa, SMDPb, and SMDPc. Discussions to be held following the preliminary site reconnaissance will serve as SMDPd.

12.3.2 Consistency with the DQO Process

The DQO process is a seven step, iterative planning approach used to prepare plans for the collection of environmental data. It will provide a systematic approach for determining the criteria that a sampling program should fulfill, the procedures to be used in the collection of the samples or measurements, determine tolerable error rates, and identify the number of samples or measurements that should be made (USEPA, 2000).

In keeping with the ERAGs process (USEPA, 1997a), Step 3 (Baseline Risk Assessment Problem Formulation) and Step 4 (Study Design and DQP Process) comprise the DQO process for the development of ERAs. As previously mentioned, Step 3 is described in Sections 12.4 and 12.5 (identification of exposure pathways and conceptual site model), 12.6 (identification of chemicals of concern), and 12.7 (identification of assessment endpoints). Step 4 is outlined in Section 12.7 (identification of measurement endpoints and lines of evidence), Section 8 of this SSP and Volumes 3A, 3B, 4A, and 4B (work plan and sampling and analysis plan). Further detail on the DQO process used in the development of sampling/analytical strategies is presented in Volumes 3A, 3B, 4A, and 4B.

12.4 Ecological Setting

The Sites are situated adjacent to the Mississippi River. The Sites, found within the villages of Sauget and Cahokia, Illinois, are generally located east of the Mississippi River, south of the MacArthur bridge railroad tracks, west of Illinois State Highway 3, and north of Cargill Road. The Sites front approximately 8,000 feet of the Mississippi River.

The Sauget Area 2 Sites includes five disposal areas, Sites O, P, Q, R, and S, adjacent, or in close proximity, to the Mississippi River. These five disposal areas were given letter designations by the Illinois Environmental Protection Agency (IEPA) in the 1980s. Two of these sites, Sites Q and R, are located on the wet side of the flood wall and levee that is operated and maintained by the US Army Corps of Engineers and the Metro East Sanitary District. The flood wall is designed to protect the City of East St. Louis and the Villages of Sauget and Cahokia from flooding. Sites O, P, and S are located on the dry side of the flood wall and levee.

Site O is located on Mobile Avenue in Sauget and occupies approximately 20 acres northeast of the American Bottoms Regional Wastewater Treatment Facility (ABRTF). Site P is located between the Illinois Central Gulf Railroad and the Terminal Railroad, and is north of Monsanto Avenue in the Village of Sauget. Site P occupies approximately 20 acres of land. Site Q occupies approximately 90 acres and is south of Sauget Site R and the old Union Electric Power Plant, west of the Illinois Central Gulf Railroad and the U.S. Corps of Engineers flood control levee, and east of the Mississippi River. The two ponds created by the borrow pit operations are located at the southern end of Site Q. Site R is located adjacent to the Mississippi and has had a temporary cap placed on it. Site S is a small disposal area west-southwest of Site O.

The following sections provide the basis for the problem formulation stage of the ERA in that the potential pathways and receptors are identified for future evaluation. The ecological condition section provides a general understanding of the ecological receptors and communities found within the Sites. At present, this is a general presentation of information as detailed evaluations have only been completed on a narrow corridor adjacent to the Sites (i.e., the Dead Creek corridor). Information detailing the characteristics of the ecosystems in each of the five Sites

and in the Mississippi River adjacent to the Sites will be identified and compiled as part of the field data collection activities.

During the course of the field activities supporting the ERA, a more thorough understanding of the characteristics of the aquatic and terrestrial ecosystems associated with the Sites will be developed. Aquatic sampling will provide details of the fish and benthic invertebrate communities, as well as physical characteristics of the surface water and sediments in the Mississippi River adjacent to the Sites. During the terrestrial sampling, a description of the habitat and dominant vegetative communities will be developed. This plant community survey will include a determination of community makeup, density, frequency and abundance. The objective of that activity will be to build a general habitat cover type map for the Sites within the Sites and to prepare a basic inventory of the dominant plant and animal species indigenous to the area.

12.4.1 Ecological Conditions

Sauget Area 2 is located in the floodplain of the Mississippi River in an area known as American Bottoms. Topographically, the area consists primarily of flat bottomland, although local topographic irregularities do occur. Generally, land surface in the American Bottoms slopes from north to south and from east to west, toward the Mississippi River. Land surface elevation ranges from 400 to 410 feet above Mean Sea Level (MSL) with little topographic relief.

The dominant ecological feature associated with the Sites is the Mississippi River. The floodplain area containing the Sites fronts approximately 14,000 linear feet of the Mississippi River. The terrestrial area is found within a category of ecosystems called floodplains, which are flat land surfaces where alluvial material has been laid down in old valleys over an extended time period. While anthropogenic influences have greatly modified the Mississippi River and the quality of its basic components, the river still influences the types of sediments and soils found near the Site, the types of aquatic organisms found within its influences, and the basic structure for the terrestrial habitat found adjacent to its shores.

The section of the Mississippi River adjacent to the Sites is called the Unimpounded Reach (USGS, 1999), which extends from St. Louis downstream to Cairo, Illinois. This section of the

river, also called the Open River Reach, is characterized by channelized aquatic habitats, with terrestrial portions that have been protected from flooding by levees to support agriculture and other uses of the historic floodplain. This scenario reflects the conditions adjacent to the Site as the riverbank has been substantially sculpted by anthropogenic activities. A rock revetment covers approximately 2,250 feet of the riverbank adjacent to Site R, and the remainder of the riverbank has been developed as piers and other structures for barge traffic. In this reach of the Mississippi River there are almost no lotic or marsh habitats. Channel depth in the center of the channel is maintained at a minimum depth of nine feet to allow for barge traffic. The current is swift, with median flows ranging from 85,000 to 95,000 ft^3/second.

USGS (1999) notes that the characteristics of sediments and surface water in the Mississippi River below its confluence with the Missouri River (approximately two miles upstream of the Sites) have long differed from the reach upstream of the confluence. Two of the prominent reasons for those differences include both the City of St. Louis and the drainage basin of the Missouri River. St. Louis has had a significant effect on water quality within the river due to sewage and industrial discharges from within the city. Missouri Department of Natural Resources (1994) notes that an estimated 300 tons of ground garbage was discharged in the river daily in 1957, and as late as 1970, raw sewage was discharged directly into the river by the City of St. Louis (Corbett, 1997). The Missouri River drains an area with highly erodible soils and is the major source of sediments to the Mississippi River. This contribution of sediment leads to changes in water clarity, sedimentation of shallow areas, and the introduction of non-Site-related sediment-borne constituents.

Boyer (1984) notes that St. Louis contributes significant amounts of constituents from wastewater effluents, industrial discharges and urban runoff, including metals and organic compounds, such as PCBs. Pesticides and herbicides are significant contaminants in the Mississippi River. The reach upstream of the Missouri confluence contributes 40 to 50 percent of the pesticide and herbicide load within the Mississippi River, even though it represents only 22 percent of the flow from the entire river (Goolsby and Pereira, 1995). USGS (1999) notes that surface water conditions in the Mississippi River have improved since the passage of the Federal Water Pollution Control Act in 1970, though concentrations of pesticides still exceed USEPA guidelines during low flow, high use periods of the year. Such concentrations of metals

and organic compounds (that often exceed screening benchmarks) have the potential to affect biological communities.

Aquatic life within the river depends upon the presence of suitable habitat, which is a function of water and sediment characteristics. Areas of deep, swift water, such as found adjacent to the Sites, would be occupied by channel dwelling fishes and would probably not support habitat that would be used for spawning or as nurseries. Fremling et al. (1989) state that the Upper Mississippi River Basin supports at least 260 freshwater fish species. Fish in channel habitats are called riverine species and occur as either streamline forms that occupy the water column such as white bass (*Morone chrysops*) or bottom-dwelling forms, such as channel catfish (*Ictalurus punctatus*) (USGS, 1999). Other common riverine species identified by USGS (1999), based on Long-Term Resource Monitoring Program (LTRMP) catch data include sauger (*Stizostedion canadense*), walleye (*Stizostedion vitreum*), and smallmouth buffalo (*Ictiobus bubalus*). Important prey species indigenous to the Unimpounded Reach area include gizzard shad (*Dorosoma cepedianum*) and emerald shiners (*Notropis atherinoides*).

While a survey of the terrestrial community in each of the Sites will be conducted, preliminary observations indicate that Sites O, P, R and S have been significantly impacted by anthropogenic activities. These activities include clearing and construction of roads and railroad lines, construction of buildings, and the development of industrial activities. These areas show signs of extensive clearing and/or disturbance, and they are vegetated either solely by herbaceous communities, or by herbaceous communities with a thin layer of early successional shrubs or trees.

Site Q is the one area having a significant quantity of floodplain forest still in evidence. USGS (1999) notes that floodplain forests are more structurally complex than upland forests and are generally differentiated into three strata. Those strata include an herbaceous ground cover layer, a shrub or sampling sub-canopy layer, and a tree layer that dominates the community. The major floodplain forest communities in the Upper Mississippi River System include those dominated by black willow (*Salix nigra*), those dominated by eastern cottonwood (*Populus deltoides*), those dominated by silver maples (*Acer saccharinum*) and those dominated by a mixed oak-hickory forest.

In 1997, a biological survey was conducted at select locations of Site Q as part of an Ecological Risk Assessment conducted by Ecology and Environment on behalf of the USEPA (USEPA, 1997b). The focus of the ERA was a small pond located in the northern portion of Site Q, and the two ponds located at the southern end of this Site. The ponds at the southern end have been identified as a location for sampling as part of the field activities to support this ERA. The northern pond was noted as being devoid of life, though the southern ponds did support populations of aquatic macrophytes and an amphibian (chorus frog, *Pseudacris triseriata*). Subsequently, a brief reconnaissance of the area in January 2001 noted that the two southern ponds were dry and did not contain any standing water. However, anecdotal statements made by USEPA personnel in April 2001 indicate that the ponds have refilled as a result of stormwater influence.

Plant species identified by the USEPA in their survey were cocklebur (*Xanthium strumarium*), common mullein (*Verbascum thapsus*), common evening primrose (*Oenothera biennis*), black-eyed susan (*Rudbeckia serotina*) and eastern cottonwood. Identified mammals included eastern cottontail (*Sylvilagus floridanus*) and whitetailed deer (*Odocoileus virginianus*). Identified birds included red-winged blackbirds (*Agelaius phoeniceus*), American robin (*Turdus migratorius*), northern cardinal (C*ardinalis cardinalis*), field sparrow (*Spizella pusilla*), domesticated pigeons (*Columba livia*), American coot (*Fulica americana*), common flicker (*Colaptes auratus*), American kestrel (*Falco sparverius*), and wild turkey (*Meleagris gallopavo*).

12.4.2 Threatened and Endangered Species

Endangered species are those organisms whose prospects for survival in an area are assumed to be in immediate danger because of a loss or change in habitat, over-exploitation, predation, competition, or disease. Threatened species are those who may become endangered if conditions surrounding the species begin, or continue to, deteriorate. There are two federally listed endangered species that can potentially be found at (or adjacent to) the Sites. Those species include the Indiana bat (*Myotis sodalis*) and pallid sturgeon (*Scaphirhynchus albus*). One federally listed threatened species that has been recorded in St. Clair County is the decurrent false aster (*Boltonia decurrens*). USEPA (1997b) noted that the decurrent false aster is found in alluvial prairie and marshland in river floodplains. It was concluded by USEPA (1997b) that it was unlikely that this species would be found at the Sites because of the history

of extensive disturbance, though the USFWS has suggested that the habitat information is inaccurate.

A federally listed species that is known to winter in the region and identified in the area is the bald eagle (*Haliaeetus leucocephalus*). The bald eagle has been recently upgraded to threatened status from endangered by the U.S. Fish and Wildlife Service.

USEPA (1997b) did list several state-listed bird species that are likely to utilize the Sites. Those species include the black-crowned night heron (*Nycticorax nycticorax*), little blue heron (*Egretta caerulea*), snowy egret (*Egretta thula*), great egret (*Casmerodius albus*), and pied-billed grebe (*Podilymbus podiceps*). The great egret and pied-billed grebe are listed as threatened by the State of Illinois; the other three species are listed as endangered by the State. Only the black-crowned night heron has been sighted within two miles of the Sites.

Additionally, there are 18 federally or state (either Illinois or Missouri) listed fish species that have been historically shown to be present in the main stem of the Mississippi River in the region of the Sites (USGS, 1999). Those species include:

Alabama shad	*Alosa alabamae*	highfin carpsucker	*Carpiodes velifer*
alligator gar	*Atractosteus spatula*	Iowa darter	*Etheostoma exile*
bigeye shiner	*Notropis boops*	lake sturgeon	*Acipenser fulvescens*
blacknose shiner	*Notropis heterolepis*	mooneye	*Hiodon tergisus*
brown bullhead	*Ameiurus nebulosus*	northern pike	*Esox lucius*
central mudminnow	*Umbra limi*	pallid sturgeon	*Scaphirhynchus albus*
crystal darter	*Crystallaria asprella*	sicklefin chub	*Macrhybopsis meeki*
flathead chub	*Platygobio gracilis*	sturgeon chub	*Macrhybopsis gelida*
greater redhorse	*Moxostoma valenciennesi*	trout-perch	*Percopsis omiscomaycus*

12.4.3 Sensitive Habitats

Sensitive habitats include those ecological systems that support endangered or threatened species (either federally or state listed) or support wetlands. Given the lack of endangered or

threatened species expected to be found on the Sites (USEPA, 1997b), habitat to support these species is not expected to be present. Menzie-Cura (1999) noted that a pair of bald eagles attempted to nest on the southern end of Arsenal Island, south of the Sites, in 1993. While the pair failed in their first attempt, it is not know whether later attempts were successful. A nest was observed by Menzie-Cura in 1996, but it did not appear to be in use.

The Clean Water Act defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (33 CFR 230.3).

A review of the National Wetland Inventory (NWI) map for the Sites, prepared by the U.S. Fish and Wildlife Service, indicates that a substantial portion of the Sites P and Q have been categorized as wetlands. These wetlands are listed as palustrine wetlands, dominated by deciduous forests, shrub/scrub plant species, or emergent plant species. Palustrine wetlands are bounded by uplands or any other type of wetlands and may be situated shoreward of lakes, river channels or in floodplains (Cowardin et al., 1979). Shrubs are woody plant species that range from 3 to 20 feet in height. Emergent plants are those species in which at least a portion of the foliage and all of the reproductive structures extend above the surface of any standing water. Typical of this type of plant include cattails (*Typha* sp.), common reed (*Phragmites australis*), rushes (*Juncus* sp.) and sedges (*Carex* sp.). Emergents are usually found in shallow water or on saturated soils. Details of these wetlands will be developed during the field activities to be conducted in support of this ERA.

12.5 Conceptual Site Model

One of the most critical elements of the ERA scoping process is the development of the CSM. The CSM describes the hypothesized source of COPECs, routes of exposure and transport, and ecological receptors associated with the Sites. The CSM serves as the rationale for the development of sampling plans and protocols, the selection of assessment and measurement endpoints, and the identification of receptors of concern. The CSM can be revised, as new site-related information becomes available.

The following sections describe in greater detail the CSM for the aquatic and terrestrial pathways associated with the Sites.

12.5.1 Aquatic Pathways

The environmental fate of COPECs is determined by the cumulative interaction of transport and transformation processes (Paustenbach, 1987). Once released into the environment, the chemicals may partition among various media (e.g., soil, water, and air). The transport processes that define the movement of chemicals between compartments are highly dependent upon the physico-chemical properties of both the chemical and the environmental media, and thus, have a direct bearing on the potential risks to the exposed populations (Paustenbach, 1987). The ability of a chemical to proceed through a migration pathway and reach an exposed receptor is directly related to the chemical properties of the constituent and the physical characteristics of the pathway.

The primary aquatic pathway of concern with the Sites is the potential discharge of groundwater containing COPECs to the Mississippi River. Two of the five Sites are located in close proximity to the east bank of the Mississippi River (Sites Q and R). The other three Sites (Sites O, P, and S) are located 1500 to 2000 feet east of the riverbank. Solid and liquid industrial and municipal wastes were disposed at these facilities from the 1950s to the 1980s. At two of the disposal sites, wastes were placed in former borrow pit excavations (Sites Q and R). Wastes were placed in excavations at two other disposal sites (Sites O and S), however, these excavations were made solely for the purpose of waste disposal. Wastes were placed on grade at the fifth disposal site (Site P). It is likely that the excavations at Sites Q and R went to or below the water table to maximize the amount of borrow material. It is unlikely that the excavations for Sites O and S extended to the water table since these disposal sites needed only shallow excavations, 5 to 10 feet deep, to accommodate the materials placed in them.

Whether or not the waste disposal excavations extended to or below the water table, the potential exists for constituent migration through the groundwater system. The aquifer beneath Sauget Area 2 consists of three distinct hydrogeologic units: 1) the Upper Hydrogeologic Unit with fine-grained, silty sands, 2) the Middle Hydrogeologic Unit with clean, medium to coarse sand and 3) the Deep Hydrogeologic Unit with clean, medium to coarse sand and gravel.

Leachate migrating from the waste disposal areas could enter these hydrogeologic units and then discharge to the river via groundwater. The ultimate discharge point for these units is the Mississippi River.

If constituents of concern are transported through the groundwater system, they would be discharged into the Mississippi River. COPECs that are discharged through groundwater will first pass through the sediments of the river channel prior to entering the water column. In coarse-grained sediments with little organic material, the dissolved groundwater-borne COPECs will pass directly to the water column. In fine-grained or organic rich sediments, a portion of the groundwater-borne constituents may adhere to sediment particles. Whether the constituents remain in the sediment or are dissolved again will depend on its chemical characteristics. Those chemicals with high organic carbon partition coefficient (K_{oc}) values will have a greater affinity for sediment, especially sediment that is high in organic matter. Such constituents would tend to remain sorbed onto sediment particles and migration would occur as a result of sediment movement, not chemical movement.

The primary mechanisms by which chemicals migrate from sediments into the water column are through desorption from sediment particles, resuspension via physical disturbance and resuspension followed by food chain transport. COPECs that are dissolved in groundwater and adsorb onto sediment particles as groundwater wells up through the sediment base may desorb from the sediment particles over time, depending upon the K_{oc} value. For some high K_{oc} constituents, such as PCBs and chlorinated pesticides, desorption from sediment particles, especially those with a high organic content, is very slow, if not minimal. For other constituents, such as polycyclic aromatic hydrocarbons (PAHs) and organic solvents, desorption is much more rapid and can lead to a steady source of the constituent into the water column.

A physical disturbance of the sediment by anthropogenic activities like dredging and prop wash from boats, or natural activities such as flooding can cause resuspension of the chemicals within the sediment. This resuspension may be long- or short-term depending upon the size and solubility of the compound and the size of the sediment particle. Re-suspended particles to which these constituents are sorbed can be either organic matter or inorganic particulates. While in the water column, pelagic flora and fauna may be directly exposed to the re-suspended chemicals as they are transported downstream to other sites. These mobilized constituents in

surface water may then be transported through the food chain to higher order trophic levels (i.e., piscivorous and omnivorous wildlife).

Once in the Mississippi River, the primary migration pathways for chemicals that are discharged from groundwater would be diffusion throughout the water body, and/or settling and bioaccumulation in the food chain. The process of diffusion is an ameliorating process because the compound is reduced in concentration. Constituents that are dissolved in groundwater and discharged into the river will pass through the sediment layer and be diffused by the larger volume of the receiving water body. Diffusion is further enhanced by the flow of water within the river upstream to downstream by increasing the rate of diffusion and moving the diluted chemicals out of the recharge zone. For species of limited mobility or sensitive life stages that may inhabit the discharge zone in close proximity to the discharge point for long periods of time, the potential for adverse impacts from exposure can still exist. However, in a river of extreme volume and flow, such as the Mississippi River in the vicinity of the Sites, dilution can be a major limiting factor to the potential for exposure of aquatic organisms to elevated levels of COPECs.

The settling of suspended particles or precipitation of dissolved chemicals removes the compound from the water column, but may increase the direct exposure to benthic organisms and bottom-rooting aquatic plants. Food chain transport from primary producers through the various trophic levels of consumers is compound specific and can lead to exposure of receptors that either live on the Sites or that come into contact with Site-related constituents that have been transported off-Site. However, food chain transport through the food web that is based on the benthic community includes a major contribution from detritus and not from primary production from rooted vegetation or epiphytic and planktonic plant species.

Another potential migration pathway to the Mississippi River is discharge via storm water runoff. Because Sites O, P, and S are found east of the flood control dike that runs parallel to the river, stormwater runoff would not be a concern. This pathway is not likely to be a major migration pathway at the Sites west of the flood control dike because the areas are covered with vegetation, soil caps, or impermeable pavement. Should it occur, surface water runoff would carry COPECs to the Mississippi River that are either dissolved in the water or adsorbed onto sediment particles. While runoff from Site R is likely limited due to the vegetation over the present cap, there are some areas of Q where runoff may occur. However, it is not presently

know whether runoff areas or patterns are such that they drain surface soils containing COPECs. A runoff study will be conducted as part of the remedial investigation activities planned for Site Q. Once in the river, dissolved or suspended COPECs in surface water would be diluted and transported as described above.

Due to the ecological significance of the Mississippi River and the recreational and commercial importance of its natural resources, the aquatic pathway is the most significant pathway associated with the Sites. As shown in Figure 12-1 (Aquatic Conceptual Site Model for the Mississippi River), constituents that are possibly released in groundwater can migrate through the sediments into the water column in the vicinity of the discharge point. The sampling that will support this ERA, described in accompanying FSPs and QAPPs (Volumes 3A and 3B), is designed to investigate the magnitude of this potential release by examining the surface water and sediment in the likely discharge areas for groundwater. The biological sampling included in the field studies is intended to provide data on the conditions of vertebrates and invertebrates associated with the aquatic system for the purpose of evaluating the potential ecological effects resulting from a possible groundwater discharge.

As noted in Section 12.4.1, a number of sources of constituents similar to those found in the Mississippi River adjacent to the Sites and in on-Site areas, including agricultural runoff, wastewater treatment facilities, industrial discharges, and non-point pollution sources, exist upstream of the Sauget Sites. With the high velocity and large volume of water in the river in the vicinity of the Sites, rapid downstream transport (i.e., toward the Sites) of materials from these upstream sources is expected. It will be necessary to use care when evaluating the potential for adverse ecological effects and identifying those that are Site-related versus those that are not. To account for the potential effects of these upstream sources and the effects of high velocity, appropriate reference locations will be utilized to place any suspected effects in the context of regional conditions and to serve as a comparison for the determination of Site-related effects.

The aquatic pathways described in this section also apply to the ponded areas located in the southern portion of Site Q. COPECs that are present in the surrounding soils may migrate into the ponds, thereby exposing biota that use or live in the ponds. As previously mentioned, the ponds were drained and have recently refilled as a result of stormwater influence. As such, the

aquatic community that is present is extremely limited and probably restricted to early successional aquatic plants and some early colonizing benthic invertebrates. However the ponds may serve as a water source for terrestrial vertebrates and a breeding spot for amphibians or aquatic birds. A conceptual CSM for the ponded areas within Site Q is presented as Figure 12-3.

12.5.2 Terrestrial Pathways

The migration of COPECs within soils may result in either direct exposure through contact with the soil or indirect exposure through the food chain to faunal communities supported by the available habitat at the Sites. Biota may come in direct contact with chemicals in soil while foraging and/or burrowing. The vectors by which chemicals in the soil may potentially be introduced into biota are direct ingestion (primary source), dermal absorption, or inhalation. The USEPA has determined that inhalation comprises less than 0.1% of total exposure and direct contact comprises approximately 1 to 11% of total exposure (USEPA, 2000). Indirect exposure occurs when a COPEC is assimilated by a species (e.g., prey/food item) at one trophic level, bioaccumulated by that trophic level, and transferred to the next trophic level through consumption.

Chemicals in surface soils may potentially move from the soils up the food chain through bioaccumulation and biomagnification processes. Soil dwelling organisms (i.e., soil invertebrates and small mammals) may bioaccumulate chemicals from direct and incidental ingestion and through direct contact with the soil.

The terrestrial pathways at the Sites are associated with the five Sites. Site O includes four lagoons that were capped with two feet of clay in 1980. Between 1966/67 and 1978, these lagoons were used to dispose of clarifier sludge from the Sauget Physical Chemical Wastewater Treatment Plant (a publicly owned treatment works). During its operation the treatment plant and associated lagoons received and treated industrial and municipal wastewater. It has been reported that approximately 10 million gallons per day of wastewater was treated, more than 95% of which was from area industries.

Site P was operated as an IEPA-permitted landfill from 1973 to approximately 1980, accepting general wastes, including diatomaceous earth filter cake and non-chemical wastes. Site P is currently inactive and partially covered by parking areas; however, access to this part of the Sites is not restricted.

Site Q is a former subsurface and surface disposal area that accepted various wastes including municipal waste, liquid chemical wastes, septic tank pumpings, drums, organic and inorganic wastes, solvents, pesticides and paint sludges. It also took plant trash, waste from other industrial facilities and demolition debris. Most of Site Q is covered with highly permeable black cinders. Site S was a disposal area. The northern portion of this part of the Site is grassed and its southern portion is covered with gravel and fenced.

Site R is a closed industrial-waste disposal area that accepted hazardous and non-hazardous bulk liquid and solid chemical wastes and drummed chemical wastes that included organics, inorganics, solvents, pesticides, and metals. The Site is capped with a clay cover whose thickness ranges from 2 feet to approximately 8 feet.

As shown in the Terrestrial Conceptual Site Models, terrestrial receptors may be exposed to constituents located in these Sites. A CSM for the terrestrial portion of the Sites is presented as Figures 12-2. If constituents are present in surface soils, the migration pathways described above could lead to the possible exposure of plant and wildlife receptors to Site-related constituents. Surface soil sampling in each area is intended to characterize the constituents present in soil in areas frequented by biological receptors. The biological sampling is intended to provide data to support an assessment of the potential for adverse ecological effects from the presence of these constituents.

Terrestrial receptors may also be exposed to COPECs present in air and in surface water. Both of these pathways are considered to be minor. Compounds with a high degree of volatilization (e.g., volatile organic compounds) can expose mammals to vapors that produce ecological effects. However, noting the age of the Sites, the partial coverage by caps and impermeable layers, and the level of historic disturbance that would act to accelerate the volatilization process, this pathway is considered to be insignificant (Sample and Suter, 1994).

Terrestrial receptors may be exposed to COPECs in water and sediments. Most small mammals (particularly rodents) obtain their water through ingestion of plants with high water content, rain puddles collected on the ground or on impervious surfaces, and from dew (Vaughn, 1986). Larger carnivores may drink from ponds, rivers, puddles, or lakes. Terrestrial receptors may also be exposed to COPECs in surface water (and sediment) through either incidental ingestion or through direct contact. Birds may be exposed through the accumulation of soil and sediment by use of these materials as grit.

12.6 Selection Of Chemicals Of Potential Ecological Concern (COPECS)

The QAPP/FSP lists target analytes for the Sites. These target analytes include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, herbicides, polychlorinated biphenyls (PCBs), dioxin/furans, and metals. The list of analytes has been developed in discussions with the USEPA.

The results of the proposed sampling and analysis of surface water, sediments, surface soils, and biota, will be used to select the list of COPECs. The number of proposed samples and the sample locations, in both the terrestrial and aquatic environments has been selected in discussions with the USEPA and are designed to reflect worst-case conditions in the two ecosystems.

Constituents will be retained on the list of COPECs and carried through the screening process if they exhibit any of the following characteristics:

Toxic – Produce a harmful effect (is toxic), based on the scientific literature or direct measures of toxicity, to the receptors likely to inhabit the Mississippi River in the vicinity of the Sites and the terrestrial environment found within the five Sites.

Bioaccumulative – Likely to bioconcentrate or biomagnify in the aquatic and terrestrial food chains likely to be at, or adjacent to, the Sites (determined as a constituents with an octanol-water partition coefficient (K_{ow}) greater than 1,000 [*Great Lakes Water Quality Initiative* (GLWQI) (40 CFR 122 et al., 1995)]; and

Persistent – Likely to remain in environmental media over time frames that are long, relative to the life spans or exposure periods of receptors likely to inhabit the Mississippi River in the vicinity of the Sites and the terrestrial environment found within the five Sites.

For those constituents that are shown to be potentially toxic, bioaccumulative or persistent, additional screening parameters will be utilized to refine the list of COPECs. The criteria for final selection and evaluation include:

Comparison to Background – The ERA will eliminate a constituent that occurs below the maximum concentration measured at a local reference area for a given medium.

Frequency of Detection – The ERA will eliminate a constituent for evaluation if the constituent is detected in less that 5% of samples from a particular medium.

Ecotoxicological profiles for the COPECs will be included within the ERA.

12.7 Identification of Receptors and Endpoints

The analysis portion of the ERA includes the estimation of potential exposures of biological receptors to Site-related COPECs and the determination of the potential effects associated with those exposures. The assessment of effects is the determination of the relationship between the concentrations of COPECs potentially identified in various matrices at the Sites and the responses of ecological receptors to these concentrations. Exposure to ecological receptors will occur either directly through mechanisms such as ingestion, incidental contact, or inhalation, or indirectly through the consumption of prey species containing elevated concentrations of COPECs. Indirect or food chain exposure can potentially result in unacceptable risks to higher trophic level organisms without their being in close proximity to the Sites. This section outlines those components that will be utilized in the assessment of the potential ecological effects associated with the exposure of ecological receptors to COPECs at the Sites.

12.7.1 Identification of Receptors of Interest

The first step in the assessment of effects is the identification of those receptors of interest (ROIs) that will be evaluated in the ERA. As it is not feasible to evaluate the relationship of all potential chemicals of interest to every species at the Sites, ROIs have been selected to represent the organisms that might be present at the Sites most often or are likely to be most sensitive to the effects of the COPECs. Selection criteria for aquatic ROIs include the following factors specified in USEPA guidance (1989a, 1992, 1994, 1997a, 1998): (1) the occurrence of potentially complete pathways for exposure of ecological resources to chemicals in environmental media; (2) resident communities or species exposed to the highest concentrations of chemicals in environmental media; (3) species or functional groups considered to be essential to, or indicative of, the normal functioning of the affected habitat; and (4) the feasibility of completing a quantitative assessment for the identified pathways and receptors.

Species were selected as ROIs for this assessment based on the following criteria:

Relative abundance and ecological importance within the identified habitats;
Availability and quality of appropriate ecotoxicological research;
The sensitivity of the organism to the COPECs;
Importance of the trophic level in the ecosystem;
The relative mobility and type of feeding habits; and
The ability to bioaccumulate COPECs.

The following ROIs have been selected for use in preparing this ERA:

For the Mississippi River aquatic community:

The benthic macroinvertebrate community;
Local fin fish;
Mink (*Mustela vison*); and
Osprey (*Pandion haliaetus*).

Benthic invertebrates were selected as ROIs because they have the greatest exposure to bottom sediments that potentially contain COPECs and they are an important link in the aquatic food chain as a food source for bottom feeding fish species in the river. The use of macroinvertebrates as biological indicators of pollution in freshwater ecosystems has distinct advantages over purely physical and/or chemical analyses (Hellawell, 1977). Physical and chemical analyses reflect the characteristics of a waterbody during a single point-in-time; whereas, biomonitoring reflects environmentally induced changes that occur over a long period of time (sometimes a year or more). Therefore, if a constituent happens to be either at extremely low levels or absent at the time of physical and chemical analysis, a false reading as to the environmental quality of an ecosystem can be obtained.

Secondly, a broad range of constituents may affect an ecosystem, some of which may not have been identified yet. Relying solely on the physical and chemical analyses to evaluate potential ecological effects may lead to missing an important ecological effect. However, biological measures can be used to ensure that such effects are identified. Though care needs to be taken when interpreting the results of biological investigations. For example, measures of abundance are more relevant than measures of community structure when evaluating benthic communities, because abundance (not diversity) is more closely tied to the most important role of the benthic community (which is serving as a prey base for higher trophic level receptors). The absence of a sensitive indicator species may not be an indication that the benthic community as a whole is not performing its function as a food source for fish and other vertebrates. Similarly, effects to biological indicators indicate that further analysis needs to be performed to determine the exact nature of the stressor (e.g., physical disturbance, specific chemical stressor, etc.).

Local finfish were selected as ROIs because they are the dominant organisms in the water column and they may be exposed to COPECs in sediments and surface water. Fish represent a food source to higher order predators (both aquatic and semi-aquatic) and are important for both recreational and commercial fisheries.

The mink and osprey were selected as upper trophic level ROIs because the biological success of local populations of these organisms can be tied to the environmental health of supporting habitats. Both species are either found in the area, or have the potential for being found in the area. They all feed on fish, so they can be tied via the food web to the sediments and surface

water of the Mississippi River. Additionally, both species are sensitive to constituents that biomagnify up the food web.

For the riverbank/floodplain terrestrial community:

Prairie vole (*Microtus ochrogaster);*
Short-tail shrew (*Blarina brevicauda*); and
Red fox (*Vulpes fulva)*.

The prairie vole was selected as a ROI because it is likely to be the dominant herbivore within the habitat provided by the Sites and with its small home range, could likely spend its entire life span within a Site. Shrews were chosen as an ROI because a large portion of their diet consists of earthworms that live within the soils of the Sites. The red fox is an upper trophic level carnivore potentially feeding on either shrews or other small rodents within the Sites.

For the riverbank/floodplain aquatic community within site-related ponds (only if water and aquatic organisms are present in the ponds at the time of the ERA supporting field activities):

The benthic macroinvertebrate community, and
Finfish or amphibians.

As discussed in Section 12.4.1, during a brief reconnaissance of Site Q conducted in January 2001, it was observed that the ponds did not contain standing water. If the ponds have refilled by the time the field studies to support this ERA are conducted, the benthic invertebrate community will be examined to assess the potential for the reestablishment of the benthic food base. However, even if the ponds have refilled with water, it is will not be likely that a finfish population will have been reestablished. The reestablishment of a finfish population will not likely occur until such time as a flood event overflows the bank of the Mississippi River and stocks the pond. However, the possibility for future impacts to fish will be examined through the evaluation of concentrations of COPECs that are identified in surface water.

While the ponds may not at present support a finfish population, they may support a breeding population of amphibians. Historic information (USEPA, 1997b) indicates that frogs were identified in the vicinity of the ponds. As a steady source of water is required for most amphibians to breed, COPECs that are found in surface water have the potential to impact amphibians during a sensitive point in their life cycle. Therefore, if no finfish are present, concentrations of COPECs in surface water will be evaluated for their potential to impact amphibians.

12.7.2 Assessment and Measurement Endpoints

The next step in the ecological risk assessment process is the identification of those endpoints that will be utilized in the ERA to evaluate the ecological effects associated with the potential exposure of ROIs to COPECs. Assessment endpoints are statements of the characteristics or attributes of the environment that are to be protected. This ERA will evaluate the following assessment endpoints:

Assessment Endpoint #1: Evaluate the potential for adverse changes in the survival, reproduction, and growth of finfish populations utilizing the Mississippi River in the vicinity of the Sites resulting from exposures to COPECs in sediments, surface waters, and/or prey;

Assessment Endpoint #2: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of piscivorous wildlife utilizing the Mississippi River in the vicinity of the Sites resulting from exposures to COPECs in prey;

Assessment Endpoint #3: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of vermivorous wildlife utilizing the five Sites resulting from exposures to COPECs in prey;

Assessment Endpoint #4: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of herbivorous wildlife utilizing the five Sites resulting from exposures to COPECs in soils and/or prey;

Assessment Endpoint #5: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of carnivorous wildlife utilizing the five Sites resulting from exposures to COPECs in prey; and

Assessment Endpoint #6: Evaluate the potential for adverse changes in the survival, reproduction, and growth of potential finfish populations within the two ponds, or the potential for adverse changes in the reproductive potential of amphibian populations breeding within the two ponds located in Site Q resulting from exposures to COPECs in surface waters.

The assessment will evaluate ecological risks relative to these assessment endpoints in the Mississippi River and the five Sites. Data to evaluate these endpoints will be collected during field studies as specified in QAPPs and FSPs that have been prepared separately.

Since the above assessment endpoints generally cannot be measured directly, measurement endpoints have been identified. There are four types of measurement endpoints or lines of evidence that will be used to assess the status and potential changes in the attributes of the environment. The lines of evidence are:

1) Determination of the potential for ecological effects by the comparison of COPEC concentrations to media-specific *ecotoxicological benchmarks* derived from the literature;
2) Biological survey data of various ROIs which are direct estimates of the assessment endpoint;
3) Bioassays which are direct measures of the relative toxicity of constituents in a particular matrix; and
4) Estimation of potential for ecological effects from estimated exposures of higher trophic level organisms to COPECs based on food chain modeling.

A weight-of-evidence approach will be utilized in evaluating data collected for each of the measurement endpoints. Each line of evidence used in the weight-of evidence approach will be correlated in an exposure-response relationship in the attempt to demonstrate a relationship between the magnitude of exposure and the magnitude of effects. A weight-of-evidence

approach (as detailed in Section 12.8) weighs each of the measurement endpoints by considering:

The strength of association between the measurement endpoints and the assessment endpoints;
Data quality; and
Study design and execution.

The strength of association refers to how well a measurement endpoint represents an assessment endpoint. The greater the correlation between the measurement and assessment endpoints, the greater the weight given to that measure of effect in the risk analysis.

The weight assigned a measurement endpoint also depends on the quality of the data as well as the overall study design and execution. The FSPs and QAPPs describe a sampling program that will provide information to evaluate each measurement endpoint. However, the ERA must evaluate the sampling effort and variability and uncertainties associated with the results following implementation. The risk characterization gives higher weight to measurement endpoints that are based on good quality data and are obtained using study designs that account for confounding variables.

Considerable uncertainty is associated with estimating potential ecological risks, because ecological systems are complex and exhibit high natural variability. Measurement endpoints typically have specific strengths and weaknesses related to the factors discussed above. Therefore, it is common practice to use more than one measurement endpoint to evaluate each assessment endpoint. Measurement endpoints are as follows:

<u>Assessment Endpoint #1:</u> Evaluate the potential for adverse changes in the survival, reproduction, and growth of finfish populations utilizing the Mississippi River in the vicinity of the Sites resulting from exposures to COPECs in sediments, surface waters, and/or prey.

Measurement Endpoints for Assessment Endpoint #1

a. The first line of evidence will be the evaluation of COPEC data obtained through the chemical analysis of surface water. The ability of surface water to potentially support viable populations of finfish will be assessed by evaluating concentrations of COPECs identified in surface water samples collected upstream, downstream and in the vicinity of the Sites. This evaluation will be conducted by comparing identified concentrations of COPECs from all sampling locations to relevant ecologically-based threshold benchmarks, including the State and Federal Ambient Water Quality Criteria for the protection of fish. The comparison will be established in terms of an exposure-response gradient both horizontally and vertically across all sampling locations. The resulting relationship will be taken as a line of evidence in conjunction with the bioassay and fish tissue data in support of an exposure-response relationship.
b. The second line of evidence will be the evaluation of surface water bioassay data. The ability of surface water to potentially support viable populations of finfish will be assessed by evaluating by survival rate test data from bioassays conducted on surface water samples collected upstream, downstream and in the vicinity of the Sites. The results of the bioassays will be examined in terms of an exposure-response relationship in correlation with the surface water chemical data and the fish tissue data. The resulting relationship will be taken as one line of evidence in conjunction with the chemical and fish tissue data in support of an exposure-response relationship.
c. The third line of evidence is the evaluation of whole body COPEC concentrations identified in fish collected upstream, downstream and in the vicinity of the Sites. The ability of surface water to potentially support viable populations of finfish will be assessed through the evaluation of concentrations of COPECs identified on a whole body basis in selected fish species. The body burden levels will be compared to tissue residue data from the literature (e.g., Jarvinen and Ankely, 1999) that indicates potential ecological concerns. The resulting relationship will be taken as one line of evidence in conjunction with the chemical and bioassay data in support of an exposure-response relationship.

d. Another line of evidence will be the evaluation of COPEC data obtained through the chemical analysis of sediments. The ability of the benthic community to perform its role as a prey base for finfish will be evaluated by comparing the concentrations of COPECs in sediments collected in upstream, downstream and Site-related sampling locations to appropriate sediment quality benchmarks for the protection of benthic macroinvertebrates. The comparison will be established in terms of an exposure-response gradient vertically across all sampling locations. The resulting relationship will be taken as one line of evidence in conjunction with the bioassay test data in support of an exposure-response relationship.
e. Another line of evidence will be the evaluation of sediment bioassay data. The ability of the benthic community to potentially perform its role as a prey base for finfish will be evaluated by evaluating the survival rates of bioassay test organisms following exposure to sediment samples collected from upstream, downstream, and Site-related sampling locations. The evaluation of the survival rates will be established in terms of an exposure-response gradient horizontally across all sampling locations. The resulting relationship will be taken as one line of evidence in conjunction with the chemical test data in support of an exposure-response relationship; and
f. A final line of evidence will be the evaluation of measures of benthic community function.

Rationale for Measurement Endpoints 1a through 1i

Because of the ecological, recreational and commercial importance of fish populations in the Mississippi River, the release of Site-related COPECs at sufficient concentrations could have an ecological impact to these resources. As described above, to evaluate this potential effect, a number of lines of evidence will be examined.

The measurement endpoints identified above were selected to evaluate the potential pathways that would result in the exposure of fish to Site-related COPECs. Those endpoints associated with surface water measurements are intended to provide an assessment of the ability of that matrix to potentially support fish. As the sampling areas are fairly limited in comparison to the size of the Study Area, assumptions will be made based on best professional judgment regarding the exposure-response relationship for upstream to downstream as well as cross-

stream relationships. The most critical of these measurements, the surface water bioassays, is intended to identify whether surface water in Site-related areas significantly affects the survival of finfish. If the bioassays indicate that the survival of test species is impaired when exposed to Site-related water, then correlation with the chemical analyses will assist in the development of exposure-response relationship and will help identify which COPEC potentially may be producing the toxicity.

While the evaluation of surface water will provide an estimate of the ability of fish to exist in Site-related waters, the analyses of fish tissue will provide a direct measurement of the potential for ecotoxicological impacts from exposure of fish to COPECs. The measure of concentrations of COPECs within fish tissue will be a direct measure of the assimilative and bioaccumulative capacity of COPECs that may be identified in surface water and will be a measure of the potential toxicity of those COPECs to fish. Care will be used when interpreting these data because discriminating between Site-related and non-Site-related causes is difficult in wide ranging species such as fish. Additionally, measurement of COPECs within fish tissue will allow for the assessment of the potential exposure and possible effects to higher trophic level organisms that feed on fish.

The evaluation of the benthic macroinvertebrate community provides a measurement of its ability to function as a prey base for finfish. By examining the benthic community through multiple measurement endpoints, as identified in the sediment triad approach, the ERA will be able to correlate chemical concentrations in sediments with measures of toxicity and biological integrity, while comparing the measured concentrations to literature values of possible effects. The benthic community assessment, the most critical measure, will provide evidence of the ability of macroinvertebrates to live in sediment found in Site-related areas. The chemical analyses will help identify which of the COPECs may be responsible for any observed toxicity. This approach will be further enhanced by the inclusion of bioaccumulation studies that examine the potential for migration of chemicals bound within the sediments to biota living within it.

> **<u>Assessment Endpoint #2:</u> Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of piscivorous species utilizing the Mississippi River in the vicinity of the Sites resulting from exposures to COPECs in prey**.

Measurements Endpoints for Assessment Endpoint #2

a. Potential risks to mink will be estimated by comparing an estimated average daily dose for each potential COPEC to a toxicity reference value for each potential COPEC identified in the literature. Exposure concentrations to mink will be estimated using finfish COPEC body burdens and a food chain model; and
b. Potential risks to ospreys will be estimated by comparing an estimated average daily dose for each potential COPEC to a toxicity reference value for each potential COPEC identified in the literature. Exposure concentrations to ospreys will be estimated using finfish COPEC body burdens and a food chain model described in Section 12.7.6.

Rational for Measurement Endpoints 2a through 2c

While COPECs that have been identified in fish may not produce direct ecotoxicological effects in fish, if the constituents are bioaccumulative, they may have the potential for producing effects in higher trophic level organisms that feed on fish. This may result in indirect impacts to more wide-ranging species, to species that are especially sensitive to particular COPECs, or to species that have been assigned special status because of low population levels or habitat requirements. For that reason, a food chain model will be employed to assess the potential exposure of two piscivorous wildlife species to COPECs in fish tissue. Using COPECs identified in small forage fish (four inches to ten inches in length), the potential for ecological risks to mink feeding along the Mississippi River and in the on-Site ponds (if there are fish present) will be calculated. The potential for ecological risks to osprey feeding along the Mississippi River will be calculated using COPECs identified in large forage fish (six inches to fourteen inches). For each species, the Average Daily Dose (ADD) of COPECs will be compared to toxicity reference values (TRVs) for that species identified from the literature. If the ADDs exceed the TRVs in a large number of locations, then the potential exists for adverse effects.

<u>Assessment Endpoint #3:</u> Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of vermivorous wildlife utilizing the five Sites resulting from exposures to COPECs in prey.

<u>Measurements Endpoints for Assessment Endpoint #3</u>

a. Potential risks to short-tail shrews will be estimated by comparing an estimated daily dose for each potential COPEC to a TRV for each potential COPEC identified in the literature. Exposure concentrations to short-tail shrews will be estimated using earthworm COPEC body burdens and a food chain model described in Section 12.7.6.

Rational for Measurement Endpoint 3a

Vermivorous wildlife have been identified by the USEPA as a trophic level of concern at the five Sites. Because the 1/3 of the diet of these animals is earthworms, which live in contact with soils containing COPECs and can potentially accumulate COPECs, potential ecological risks to vermivorous wildlife will be evaluated by using COPEC earthworm tissue residue data to estimate ADDs for short-tail shrews. Earthworm residue data will be collected by the use of earthworm bioassay tests using soil collected from the five Sites. ADDs will be compared to TRVs and if the ADDs exceed the TRVs in a large number of locations, then the potential may exist for adverse effects to short-tailed shrews.

<u>Assessment Endpoint #4:</u> Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of herbivorous wildlife utilizing the five Sites resulting from exposures to COPECs in soils and/or vegetation.

<u>Measurements Endpoints for Assessment Endpoint #4</u>

a. The ability of the plant community to provide habitat for herbivorous wildlife will be measured by the comparison of concentrations of COPECs in surface soils at the Sites to appropriate surface soil quality benchmarks for the protection of plants; and

b. Potential risks to prairie voles will be estimated by comparing an estimated daily dose of each potential COPEC to a TRV for each potential COPEC identified in the literature. Exposure concentrations to prairie voles will be estimated using plant COPEC tissue concentrations and a food chain model described in Section 12.7.6.

Rational for Measurement Endpoints 4a through 4c

If soil contains COPECs, plant roots may be in constant contact with, or at least in close proximity to, constituents that can be either toxic to plants or that can be translocated up into the various parts of a plant and then consumed by higher order trophic level receptors. Cell membrane barriers within roots act to restrict the movement of COPECs into the root cortex; thereby, limiting the translocation and the actual expression of ecological effects. However, there is the potential that certain COPECs may accumulate in various plant tissues and then be consumed by herbivorous wildlife. The collection of plant tissue for chemical analysis will provide a direct measurement of the uptake potential of COPECs by plants and will allow for the assessment of impacts to higher trophic level organisms. Ecological risks to herbivorous wildlife will be estimated through the determination of ADDs for a prairie vole and comparison of the ADD to the TRV derived from the literature. If the ADD exceeds the TRV at a large number of locations, then there is the potential for adverse ecological risks.

Screening of COPECs against soil benchmarks allows for the estimation of potential ecological impacts to plants at the five Sites. However, this is a highly conservative assessment as the development of soil screening benchmarks is still in its infancy, and the existing data are often dependent upon weak correlations, laboratory conditions, and extreme uncertainty factors.

Assessment Endpoint #5: Evaluate the potential for adverse changes in the survival, reproduction, and growth of populations of carnivorous wildlife utilizing the five Sites resulting from exposures to COPECs in prey.

Measurement Endpoints for Assessment Endpoint #5

Potential risks to the red fox will be estimated by comparing estimated daily dose of COPECs to TRVs identified in the literature. Exposure concentrations to red fox will be

estimated using plant COPEC tissue concentrations, earthworm COPEC tissue residue concentrations, and a food chain model described in Section 12.7.6 that estimate COPEC body burdens in prairie voles and shrews.

Rational for Measurement Endpoints 5a

Estimated concentrations of COPECs in the prairie vole and the short-tail shrew may not produce direct ecotoxicological effects. However, if the constituents are bioaccumulative, they may have the potential for producing effects at higher trophic levels. This may result in indirect impacts to more wide-ranging species, to species that are especially sensitive to particular COPECs, or to species that have special status because of population levels or habitat requirements. For that reason, a food chain model will be employed to assess the potential exposure of an upper level carnivore (the red fox) to COPECs in voles and shrews. Using estimated concentrations of COPECs in prairie voles and short-tail shrews, the potential for ecological risks to red fox feeding within the five Sites will be calculated. The Average Daily Dose (ADD) of COPECs will be calculated and compared to toxicity reference values (TRVs) for the red fox. If the ADD exceeds the TRV in a large number of locations, then the potential exists for adverse effects.

<u>Assessment Endpoint #6:</u> Evaluate the potential for adverse changes in the survival, reproduction, and growth of potential finfish populations within the two ponds, or the potential for adverse changes in the reproductive potential of amphibian populations breeding within the two ponds located in Site Q resulting from exposures to COPECs in surface waters.

<u>Measurement Endpoints for Assessment Endpoint #6</u>

As previously indicated, in January 2001 the two ponds located in Site Q did not contain standing water, though more recent information provided by the USEPA indicates that the ponds have refilled. Information from previous studies (USEPA, 1997b) indicates that the ponds contained water and did support a standing population of fish. While the ponds may be filled during the ERA supporting field activities, it is highly unlikely that they would have developed a finfish community by that time. Therefore, should the

ponds be filled at the time of the ERA supporting field activities and contain a finfish population, then the same measurement endpoints used for evaluating the fish population in the Mississippi River (measurement endpoints 1a through 1i) will be used for evaluating the viability of a potential aquatic community within the ponds. However, the pond could provide breeding habitat for amphibians (chorus frogs have been historically identified in the vicinity of the ponds). If a finfish community is not present at the time of the ERA supporting field activities, then concentrations of each potential COPEC that may be identified in surface water will be compared to TRVs for its associated COPEC that have been identified in the literature to evaluate the potential for ecological risks to breeding amphibians. Bioassay data will also provide information on the likelihood of COPECs in surface water to impact the ability of amphibians to breed within the ponds.

Methodologies for collecting the data required to measure the effects are described in separate FSPs and QAPPs for both the aquatic and terrestrial portions of the Sites.

12.7.3 Ecotoxicological Benchmarks

As described in Section 12.7.2, some of the measurement endpoints to be used in the assessment of potential risks to ecological receptors in the terrestrial and aquatic environments include the comparison of ecotoxicological benchmarks to Site-related data for various media. These benchmarks are risk-based screening concentrations that will be used to evaluate the concentrations of chemicals detected in surface water, sediment, and surface soil in aquatic and terrestrial areas of interest at, and adjacent to, the Sites. They are species-specific and chemical-specific, and will represent chemical concentrations in a matrix, below which adverse effects will not likely occur.

However, the benchmarks are not intended to serve as reference levels that will trigger specific actions if exceeded. The exceedance of a benchmark is not confirmation that an ecological impact is occurring. Rather, the benchmarks are primarily intended to help focus and prioritize project objectives and data requirements during the planning and implementing of site-specific investigations, by identifying constituents and particular areas of sites that may pose potential risks to aquatic and terrestrial ecological receptors.

12.7.3.1 Surface Water Screening Benchmarks

Concentrations of COPECs identified in surface water will be compared to the National Ambient Water Quality Criteria (NAWQC) (USEPA, 1996). Acute and chronic NAWQC values were developed for the protection of aquatic life in freshwater environments. Acute and chronic Tier II Secondary Values (SVs) will also be used during the screening process when a NAWQC is unavailable. Together, these criteria or benchmarks provide an initial basis for evaluating potential impacts to ecological receptors. The surface water screening benchmarks are described below.

National Ambient Water Quality Criteria and Tier II Secondary Values

Acute NAWQC values are calculated as ½ the final acute value, which is the fifth percentile of the distribution of 48- to 96-hour LC_{50} values or equivalent EC_{50} values for each criterion chemical. Acute values correspond to concentrations that would cause less than 50% mortality in 5% of the exposed population in a brief exposure. Chronic NAWQC values are the final acute value divided by the final acute:chronic ratio (Suter, 1996). NAWQCs are available for a limited number of compounds.

In the absence of NAWQCs, Tier II SVs will be calculated using the methodology presented in the *Great Lakes Water Quality Initiative* (GLWQI) (40 CFR 122 et al., 1995). Tier II acute and chronic SVs are based upon fewer data than are required for the calculation of NAWQCs and safety factors to account for the lack of complete data. The use of safety factors is designed to result in concentrations that are expected to be lower (i.e., more stringent) in approximately 80% of the cases than the NAWQC for a chemical calculated with sufficient test data (Suter, 1996). NAWQCs for the protection of aquatic life are based on thresholds for statistically significant effects on individual responses of fish and aquatic invertebrates. Those thresholds correspond to approximately 25% reductions in the parameters (i.e., survival, growth or reproduction) of chronic fish tests (Suter et al., 1987). Because of the compounding individual responses across life stages, the chronic NAWQCs frequently correspond to much more than 20% effects on a continuously exposed fish population (Barnthouse et al., 1990). Therefore, an exceedance of the chronic Tier II SV is assumed to correspond to a 20% or greater effect (i.e., reduction) on the survival, growth, or fecundity of the fish community. The acute and chronic Tier II SVs used

in this assessment and their derivation are described in detail in Suter and Mabrey (1994) and Suter (1996).

For compounds including the dioxins and furans, toxicity equivalent factors (TEFs) have been developed for fish (Van den Berg et al., 1998.) that indicate the relative potency of the individual 2,3,7,8-substituted congeners to the toxicity of 2,3,7,8-tetrachloro-dibenzo-p-dioxin (2,3,7,8-TCDD). These TEFs will be used to evaluate surface water concentrations of the dioxin and furan congeners.

To assess the potential for ecotoxicological impacts to amphibians breeding in the ponds, concentrations of COPECs in the surface water of the ponds will be compared to relevant benchmarks. The scientific literature will be evaluated to determine appropriate benchmarks for amphibians. If none are available out of the literature, then AWQC values will be used instead.

12.7.3.2 Sediment Screening Benchmarks

Ontario Lowest Effects Levels (LELs) and Severe Effects Levels (SELs) (Persaud et al., 1993) will be used for screening sediments. If LEL and SEL values are unavailable for a chemical constituent, a hierarchical approach to identifying other sediment benchmarks will be used. If LEL and SEL values are not available, then the order in which other sources will be considered in the identification of a benchmark for a particular constituent include:

1. Threshold Effect Level (TEL) and Probable Effects Level (PEL) values developed by Smith et al. (1996)
2. USEPA Sediment Quality Benchmarks or Criteria (SQBs and SQCs, respectively) (USEPA, 1998b); and
3. National Oceanic and Atmospheric Administration (NOAA) Effects Range-Low (ER-L) and Effects Range-Median (ER-M) values (Long et al., 1995).

These values will be used for screening purposes. An exceedance of these screening benchmarks does not necessarily indicate that the benthic community has been adversely affected.

Lowest Effects Levels and Severe Effects Levels

The Ontario Ministry of the Environment (MOE) has prepared provincial sediment quality guidelines (SQGs) using the Screening Level Concentration (SLC) Approach. The SLC approach estimates the highest concentration of a particular constituent in sediment that can be tolerated by approximately 95% of benthic infauna (Neff et al., 1988). The SLC is derived from synoptic data on sediment chemical concentrations and benthic invertebrate distributions. These values are based on Ontario sediments and benthic species from a wide range of geographical areas within the province (Persaud et al., 1990). The guidelines define levels of ecotoxic effects and are based on the chronic, long-term effects of constituents on benthic organisms (Persaud et al., 1993).

The SELs for organic constituents will be normalized for the site-specific total organic content within the sediment at each location. Concentrations of organic compounds detected in sediment at each location will be compared to the TOC-normalized SEL to determine the magnitude or probability of the potential for an ecological impact on the benthic macroinvertebrate community at that location.

LELs and SELs are screening values used for the identification of potential ecological impacts in sediments. They do not take into account site-specific attributes such as bioavailability, bioaccumulation, or the acclimation of organisms to the presence of a COPEC. Therefore, they must be used in conjunction with other sediment screening tools such as field observations and bioassays.

Threshold Effect Level and Probable Effect Level Values

If MOE SQGs are not available for a particular constituent, then TEL and PEL values will be utilized for comparison of sediment concentrations. TEL and PEL values were developed based on a review of sediment chemistry and bioassay data stored in the Biological Effects Data Base for Sediments (BEDS), along with parameters that can affect bioavailability. The TEL values are based on the geometric mean of the 15^{th} percentile concentration from the *effect* data set and the 50^{th} percentile from the *no effect* data set. The PEL is calculated from the *effect* data set and the 85^{th} percentile concentration of the *no effect* data set.

Sediment Quality Criteria and Sediment Quality Benchmarks

If MOE SQGs and TEL/PEL values are not available, then USEPA SQCs and SQBs (USEPA, 1998) values will be utilized for comparison of sediment concentrations. The USEPA SQCs and SQBs were derived by the equilibrium partitioning (EqP) method that uses the K_{ow} and determines the sorption capacity of the sediment by the mass fraction of organic carbon in the sediment (USEPA, 1998b). The SQCs and SQBs are based on the toxicity of compounds in water expressed as the NAWQC or Tier II Secondary Chronic Values (SCVs) and partitioning of the constituent between sediment organic matter and pore water. These benchmarks are calculated using the site-specific TOC content in the sediments at each location. If USEPA SQBs or SQCs are unavailable, SQBs derived by Jones et al. (1997) using the NAWQC or Tier II SCVs will be used.

Similarly, the dioxins and furans, toxicity equivalent factors (TEFs) have been developed for fish (Van den Berg et al., 1998.) that indicate the relative potency of the individual 2,3,7,8-substituted congeners to the toxicity of 2,3,7,8-tetrachloro-dibenzo-p-dioxin (2,3,7,8-TCDD). These TEFs will be used with the EqP approach to evaluate sediment concentrations of the dioxin and furan congeners.

It is important to note that because of the use of water quality criteria as allowable porewater concentrations, they are likely to be overprotective of benthic organisms. Therefore, they must be used in conjunction with other sediment screening tools such as field observations and bioassays.

NOAA Effects Range-Low and Effects Range-Median Values

If none of the other benchmarks are available for a particular constituents, then the NOAA Effects Range-Low (ER-L) and Effects-Range-Median (ER-M) values will be used. The NOAA ER-L and ER-M values correspond to the tenth and fiftieth percentile of estuarine sediment concentrations reported to be associated with some level of toxic effects (Long et al., 1995). NOAA uses them as concentrations above that adverse effects may begin or are predicted to begin among sensitive life stages and/or species as determined in sublethal tests. It is important to note that because of the limitations used in the development of the NOAA values, the exceedance of a benchmark is not confirmation of an adverse effect, only the indication of the potential for an adverse effect. These limitations, such as the confounding influence of

multiple chemicals and the lack of consideration of bioavailability in screening value development, require interpretation of all available site-specific data prior to concluding that an adverse effect does exist.

12.7.3.3 Soil Screening Benchmarks

To determine if the chemical concentrations in surface soils may be toxic to the plant community, the detected concentrations will be compared to Lowest Observed Effects Concentrations (LOECs) as determined in laboratory phytotoxicity studies (Will and Suter, 1995, and Efromyson et al., 1997). The soil screening benchmarks are based on data provided by toxicity studies in the field or more commonly in greenhouse and growth chamber settings. These studies evaluated the effects of chemicals on various trees, wildflowers, grasses, and vegetable species. The plants were exposed to a variety of concentrations, soil types (with differing physicochemical properties), and exposure periods. Measurement endpoints common to the phytotoxicity tests included growth and yield parameters which represent a greater than 20% adverse effect. Growth and yield measurements are direct estimates of the potential impacts to the plant community.

As with sediments, a hierarchical approach to identifying soil benchmarks for screening potential constituents of concern in soils will be used. The benchmarks in order of their evaluation are as follows:

1. ONRL vegetative benchmarks (Efromyson et al., 1997);
2. USEPA Draft Ecological Soil Screening Levels (USEPA, 2000);
3. Canadian Soil Screening Values (British Columbia Regulation 375/96, 1997)
4. Dutch Soil Intervention Values; and
5. NOAEL/LOAEL identified in literature sources such as Eisler (2000a, 2000b, and 2000c).

12.7.4 Toxicity Tests

The ERA will use laboratory surface water and sediment bioassays conducted on samples collected from the Mississippi River to evaluate the toxicity of these two matrices to fish and

macroinvertebrates. The results of the toxicity tests will be correlated with other lines of evidence in the respective matrix to develop exposure-response relationships. The exposure-response relationship will be developed using gradients across all sampling locations.

12.7.5 Wildlife Screening Benchmarks

Potential ecological impacts to wildlife ROIs will be assessed by comparing the exposures to ROIs (calculated using a simplified food chain models) to wildlife benchmarks identified from the literature. The wildlife benchmarks are toxicity reference values (TRVs) that are derived from available toxicological data.

Two TRVs will be derived for each chemical and wildlife ROI. One will be based on the no-observed-adverse-effect-level (NOAEL) and the other will be based on the lowest-observed-adverse-effect-level (LOAEL). The NOAEL corresponds to the highest dose at which no adverse effects on growth, reproduction, or survival have been observed. The LOAEL corresponds to the lowest dose at which adverse effects on growth, reproduction or survival have been observed. The ERA will indicate whether the NOAEL and LOAELs are bounded or unbounded. Bounded values are those data sets where a NOAELs and LOAELs has been determined for a certain chemical. An unbounded data set is an NOAEL for which there are no LOAELs, thereby adding uncertainty by not having an identified point at which a chemical may first illicit an effect. Unbounded TRVs will be identified as a source of uncertainty. TRVs for wildlife ROIs (both aquatic and terrestrial) will be reported in units of COPEC exposure per unit bodyweight per day (mg COPEC/kg bw-day) for a specified effect to the receptor. For the ERA, TRVs for wildlife ROIs will be derived from laboratory study results by generally following the methodology of Sample et al. (1996). The following literature sources will be used in the selection of the TRVs:

U.S. Fish and Wildlife Service biological reports prepared by R. Eisler;
Toxicological studies cited in Sample et al. (1996);
U.S. Army Corps of Engineers Waterways Experiment Station online database;
Ecotox – Ecological Modelling and Ecotoxicology database by L.A. Jorgensen, S.E. Jorgensen, and S.N. Nielsen, Elsevier Publishers, 2000;
Computer online databases, such as Toxline, Biosis, Wildlife Fisheries Review, Pollution Abstracts, and Environmental Abstracts;

USEPA Ecotox database; and

Other readily available literature.

When reviewing the toxicological literature and selecting the most appropriate study for TRV development, several factors will be considered, including:

Taxonomic relationship between the test animal and the indicator species;

Use of laboratory animals or domesticated species;

Ecological relevance of the study endpoints; studies with toxicity endpoints, such as reproduction, growth, behavior and developmental endpoints will be targeted. Sensitive endpoints such as reproductive or developmental toxicity will be preferentially selected because they are closely related to the selected assessment endpoints;

Toxicological studies in which the chemical was administered through the diet of the test species will be preferred over studies using other oral dosing methods, such as gavage; and

Long-term studies representing chronic exposure will be preferentially selected.

Species specific toxicity studies may not be available for all COPECs. For mammalian species, smaller animals have higher metabolic rates and are usually more resistant to toxic chemicals because of more rapid rates of detoxification. It has been shown that metabolism is proportional to body surface area that, for lack of direct measurements, can be expressed in terms of body weight (bw) raised to the 3/4 power ($bw^{3/4}$) (Travis and White, 1988; Travis et al., 1990; and USEPA, 1992b). If the dose (d) itself has been calculated in terms of unit body weight (i.e., mg/kg), then the dose per unit body surface area (D) equates to:

$$D = \frac{d \; x \; bw}{bw^{3/4}} = d \; x \; bw^{1/4}$$

The assumption is that the effective dose per body surface area for species "a" and "b" would be equivalent. Therefore, knowing the body weights of two species and the dose (d_b) producing a given effect in species "b," the dose (d_a) producing the same effect in species "a" can be

determined. Using this approach, if a NOAEL is available for a test species ($NOAEL_t$), the equivalent NOAEL for a wildlife species ($NOAEL_w$) will be calculated using the adjustment factor for differences in body size:

$$NOAEL_w = NOAEL_t \left(\frac{bw_t}{bw_w} \right)^{1/4}$$

This methodology is equivalent to that the USEPA uses in their carcinogenicity assessments and Reportable Quantity documents for adjusting from animal data to an equivalent human dose.

For the dioxins and furans, toxicity equivalent factors (TEFs) have been developed for mammalian wildlife receptors (Van den Berg et al., 1998.) that indicate the relative potency of the individual 2,3,7,8-substituted congeners to the toxicity of 2,3,7,8-tetrachloro-dibenzo-p-dioxin (2,3,7,8-TCDD). These TEFs will be used to develop congener-specific TRVs to evaluate the potential effects to mammalian wildlife receptors of the 2,3,7,8-substituted dioxin and furan congeners.

For avian receptors, however, there are reports in the literature (e.g., studies cited in Sample et al.. 1996) that state that the above relationship for the majority of chemicals reduces to a factor of one (exponent = 0). That is, there does not seem to be a scaling related to body weight or surface area for birds.

For the dioxins and furans, toxicity equivalent factors (TEFs) have been developed for avian wildlife receptors (Van den Berg et al., 1998.) that indicate the relative potency of the individual 2,3,7,8-substituted congeners to the toxicity of 2,3,7,8-tetrachloro-dibenzo-p-dioxin (2,3,7,8-TCDD). These TEFs will be used to develop congener-specific TRVs to evaluate the potential effects to avian wildlife receptors of the 2,3,7,8-substituted dioxin and furan congeners.

In cases where a NOAEL for a specific chemical is not available, but a LOAEL has been determined experimentally, or where the NOAEL is from a subchronic study, the chronic NOAEL will be estimated. USEPA (1993) suggests the use of uncertainty factors of 1 to 10 for

subchronic NOAEL to chronic NOAEL and LOAEL to NOAEL estimation. Based on the available literature, uncertainty factors will be derived for extrapolating from study results to wildlife chronic NOAEL and LOAEL benchmarks.

If toxicological animal studies are not available for a particular COPEC, then quantitative structure activity relationships will be considered and a surrogate chemical will be selected when possible. If the COPEC can not be assessed quantitatively, then the risks associated with the constituent will be qualitatively discussed.

TRVs for each constituent and each ROI will be submitted to USEPA for review and approval prior to preparation of the ERA. In order to conservatively assess the potential for ecological risks from the presence of PCBs in the terrestrial environment, mink (*Mustela vison*) TRVs for PCBs will be used as a surrogate TRV for the short-tailed shrew.

12.7.6 Wildlife Exposure Models

For the wildlife ROIs, a generalized exposure model will be utilized to estimate exposure to the selected wildlife species. Exposure to each COPEC will be estimated by calculating an average daily dose (ADD) using (1) exposure media-specific concentrations, (2) estimated or measured exposure-point concentrations for prey, and (3) receptor-specific exposure parameters. The ADD represents the amount of a chemical that an individual member of a receptor population would ingest if the individual foraged at least a portion of the time within the area used to develop exposure-point concentrations.

Exposure point concentrations for wildlife receptors are best expressed as average COPEC concentrations in prey, surface water, and sediment or soil within the receptors' foraging area. Air is not considered a pathway of concern for this ERA. ADDs for ROIs will be developed based on procedures outlined in Sample et al. (1996) and USEPA (1993). For this ERA, it is assumed that food items are obtained from a particular area and environmental medium as a function of an Area Use Factor (AUF) and a Seasonal Use Factor (SUF). The AUF accounts for relative foraging times based on the ratio of the amount of habitat containing COPECs from a particular on-Site location to the species-specific foraging area. The SUF accounts for the portion of the year that an ROI may be exposed to Site-related COPECs. The total ADD is the

sum of ADDs for each of the pathways (i.e., food, surface water, and sediment and/or soil), adjusted for the seasonal duration of exposure and normalized to body weight.

The surface water input for both the red fox and the mink will use water from both the Mississippi River and from the ponds in Site Q, if water is present and samples are collected. If pond water is included, the water input value will include data from the two water sources presented on an area weighted basis, using the length of shoreline as the basis for the weighing. The formula for calculating the ADD is as follows:

$$ADD = (Dose_{food} + (Dose_{sediment} \text{ or } Dose_{soil}) + Dose_{water}) \times SUF$$

where:

ADD	=	Average daily dose of COPEC (mg/kg BW/day);
$Dose_{food}$	=	Dose of COPEC in food (mg/kg BW/day);
$Dose_{sediment}$	=	Dose of COPEC in sediment (mg/kg BW/day), aquatic ROIs;
$Dose_{soil}$	=	Dose of COPEC in soil (mg/kg BW/day), terrestrial ROIs;
$Dose_{water}$	=	Dose of COPEC in water (mg/kg BW/day);
SUF	=	Seasonal Use Factor (unitless); and

The individual terms of the equation are calculated as:

$$Dose_x = IR_x \times C_x \times AUF$$

where:

$Dose_x$	=	Dose of the particular medium in mg/kg BW/day or L/kg BW/day;
IR_x	=	Ingestion rate of medium in mg/kg BW/day (wet weight) or L/kg BW/day;
C_x	=	Concentration of COPEC in particular medium in mg/kg or mg/L; (The average concentration of a COPEC from an area of interest will be used as the exposure point concentration, this value will be

replaced with more realistic assumptions or site-specific prey data as appropriate); and

AUF = Area Use Factor (unitless).

The development of exposure estimates will be made for each of the wildlife ROIs, except the red fox, on a site by site basis, using data from each of the five Sites on an individual basis. Data from each sample location will be included in the exposure estimation for that particular site. For the red fox, the five Sites will be considered in total in the determination of exposure estimates. The results of surface soil, surface water, plant, and earthworm chemical analyses will be examined using both the mean and 95th Upper Confidence Limit (UCL) for the determination of exposure. Noting that the five areas are not contiguous, an area weighted value will be applied to the Sites in relationship to the entire area east of the Mississippi River, south of the MacArthur bridge railroad tracks, west of Illinois State Highway 3, and north of Cargill Road.

12.7.6.1 Exposure Model Input Parameters

Receptor-specific exposure parameters from the scientific literature will be used estimate the ADD for each ROI. Receptor-specific exposure parameters include body weight, food ingestion rate, water ingestion rate, and incidental sediment or soil ingestion rate. An additional exposure parameter, foraging habitat and range will be used to determine the size and type of areas for assessment. The species-specific life history parameters used to calculate exposure for various ROIs are listed below. All exposure parameters are from USEPA (1993) and/or Sample and Suter (1996). The primary citation is indicated adjacent to the parameter.

To estimate the potential COPEC exposure concentrations for the mink foraging either along the Mississippi River or at the edges of the ponds, the following assumptions will be made:

Body weight = 550 g (using female as sensitive endpoint; Mitchell, 1961);
Food ingestion rate = 0.137 kilograms/ day (Bleavins and Aulerich, 1981);
Sediment consumption = negligible (Sample and Suter, 1994);
Water consumption = 0.099 L/d (Sample and Suter, 1994);

Diet consists of 100% fish (actual diet composition is dominated by mammals (46%), then fish (15%), amphibians (13%), and birds (8%); however for purposes o f this ERA, the diet will be assumed to be 100% fish, Sample and Suter, 1994);

Home range = 770 hectare (range size and shape depends on habitat, being usually linear along streams and circular in marshes, USEPA, 1993);

SUF = 100%;

AUF = 100% (conservatively assumes that foraging range equal to the length of shoreline abutting the Sites; USEPA, 1993); and

Habitat = Mink are found associated with aquatic habitats of all kinds, including waterways such as rivers, streams, lakes, ditches, swamps, marshes and backwater areas (USEPA, 1993).

To estimate COPEC exposure concentrations potentially experienced by the osprey foraging along the Mississippi River, the following assumptions will be made:

Body weight = 1,568 g (using female as sensitive endpoint; Brown and Amadon, 1968);

Food ingestion rate = 0.21 g/g of BW/d (Poole, 1983);

Sediment consumption = negligible (USEPA, 1993);

Water consumption = 0.051 g/g of BW/d (USEPA, 1993);

Diet consists of 100% fish (USEPA, 1993);

Foraging radius = 1.7 km (Dunstan, 1973);

SUF = 100%

AUF = 25% (assume foraging range equal to four times the size of the Sites; Dunstan, 1973); and

Habitat = USEPA (1993) reports that the majority of osprey populations in the United States are associated with marine environments, but large inland rivers, lakes and reservoirs may support this species. Habitat useage is dependent upon the presence of good nesting sites (e.g., tops of isolated and often dead trees and man-made structures) in proximity to open, shallow water with a plentiful supply of fish. USEPA (1993) further reports that osprey are almost exclusively piscivorous and that osprey will most successfully feed on slow-moving fish that eat benthic organisms in shallow waters and fish that remain near the water's surface.

To estimate COPEC exposure concentrations potentially experienced by the short-tail shrew foraging within the Sites, the following assumptions will be made:

Body weight = 0.015 kg (Schlessinger and Potter, 1974);
Food ingestion rate = 0.009 kg/d; Barrett and Stuek, 1976);
Soil consumption = 0.00117 kg/d (Talmage and Walton, 1993);
Water consumption = 0.033 L/d (Chew, 1951);
Diet consists of 31.4% earthworms (the remainder is reported as being insects and plants, Whitaker and Ferraro, 1963), for purposes of this ERA, the diet of the short-tailed shrew will be considered to consist of 67% of earthworms and 33% of other terrestrial invertebrates, chemical residue data from the earthworms will be developed using bioassay/bioaccumulation tests using soil samples from the Sites, terrestrial invertebrate residue data will be developed through the laboratory analysis of composite samples from the Sites);
Home range = 0.39 ha (Buckner, 1966);
SUF = 100%;
AUF = 100% (This is a conservative assessment that assumes that the shrew will spend it entire life within an area containing elevated COPEC concentrations and that the limited number of soil samples that will be collected are representative of soil conditions throughout a given area); and
Habitat = USEPA (1993) notes that short-tailed shrews inhabit a variety of habitats and are common in areas with abundant vegetative cover, though they require cool, moist habitats because of their high metabolic rates and water-loss rates.

To estimate COEPC exposure concentrations potentially experienced by the prairie vole foraging within the Sites, the following assumptions will be made:

Body weight = 41.6 g (Abramasky and Tracy, 1980);
Food ingestion rate = 0.10 g/g of BW/d (Dice, 1922);
Soil consumption = 0.00012 (Beyer et al., 1994);
Water consumption = 0.21 g/g of BW/d (Dice, 1922);
Diet consists of 100% plant material (USEPA, 1993);

Home range = 0.098 ha (Jike et al., 1988);
SUF = 100%;
AUF = 100% (This is a conservative assessment that assumes that the prairie vole will spend it entire life within an area containing elevated COPEC concentrations and that the limited number of soil samples that will be collected are representative of soil conditions throughout a given area); and
Habitat = USEPA (1993) reports that the prairie vole inhabits a wide variety of prairie plant communities and moisture regimes, including riparian, short-grass and tall-grass prairie communities. They generally prefer areas of dense vegetation and their presence in a habitat depends upon the presence of suitable cover for their runways.

To estimate COPEC exposure concentrations potentially experienced by the red fox foraging within the Sites, the following assumptions will be made:

Body weight = 4.13 kg (using female as sensitive endpoint; Storm et al., 1976);
Food ingestion rate = 0.14 g/g of BW/d; Sargeant, 1978);
Soil consumption = 0.0126 kg/d (Sample and Suter, 1984);
Surface water consumption = 0.38 L/d (Sample and Suter, 1994);
Diet consists of 68.8% mammals and 10.4% plants (the remainder of the diet is assumed to be uncontaminated insects, birds and miscellaneous items, Sample and Suter, 1994);
Territory size = 96 ha (using female as sensitive endpoint; Ables, 1974);
SUF = 100%;
AUF = 100% (This is a conservative assessment that assumes that the red fox will spend it entire life within an area containing elevated COPEC concentrations and that the limited number of soil samples that will be collected are representative of soil conditions throughout a given area); and
Habitat = Red foxes are the most widely distributed carnivore in the world and will inhabit areas ranging from arctic habitats to temperate deserts (USEPA, 1993). They prefer broken and diverse upland habitats, such as occur in most agricultural areas.

12.7.6.2 Exposure Model Modifications for the Red Fox

As described above, the generalize exposure model will be utilized to estimate exposure values for each potential COPEC to the red fox based on ingestion of food and water from the Sites. The food parameter described in Section 12.7.6.1 includes both a plant and animal component. While direct measurements of the concentrations of COPECs in plant material will be made for each of the Sites, concentrations in animal prey will not be measured, but will have to be estimated. The estimation of the concentration of COPECs in prey species will be made based on the guidance outlined in USEPA (1999b). A compound-specific bioconcentration factor (BCF) consists of biotransfer factors (Ba) and ingestion rates. A biotransfer factor is the ratio of the compound concentration in fresh (wet) weight animal tissue to the daily intake of the compound by the animal through the ingestion of food items and media (soil, sediment, and/or surface water). The following formula is used to derive the BCFs for the ingestion of prey by the red fox:

$$BCF_{F-A} = Ba_A \times IR_F$$

where:

BCF_{F-A}	=	Bioconcentration factor for food item (prey to red fox) in mg of COPEC/kg FW tissue / mg COPEC/kg FW food item);
Ba_A	=	COPEC-specific biotransfer factor applicable for the animal (day/kg FW tissue) as presented in Appendix D to USEPA (1999b) (As a Ba_A is not presented specifically for the prairie vole, the BA_A for the deer mouse (*Peromyscus maniculatus*) will be used in the development of the BCF_{F-A} values); and
IR_F	=	Red fox ingestion rate (kg FW/day)

The red fox exposure calculations will be based on the following pathways:

1. Soil to plant to vole to red fox;
2. Soil to earthworm to short-tailed shrew to red fox;
3. Soil to plant to red fox; and

4. Soil to red fox through incidental ingestion.

To fill all the terms of the exposure model calculation, direct measurements of soil concentrations of COPECs for incidental ingestion will be used, as will direct measurements of COPECs in plants. Using the measurement of COPECs in plants, the BCF_{F-A} will be applied to the ADD calculated for the voles for each COPEC, as described in USEPA (1999b). That resulting value will then be included in the exposure model calculations as the concentration of each COPEC in animal prey for the red fox.

12.8 Risk Characterization

Risk characterization combines Site-related exposures and the potential for ecotoxicological effects to estimate the likelihood of ecological risks. The risk characterization is conducted for each line of evidence and then a weight-of-evidence approach is used to evaluate effects for each assessment endpoint. For the ideal risk assessment, there are three lines of evidence; literature-derived single chemical toxicity data which indicates the potential effects of the COPEC concentrations measured in site media, biological surveys of the potentially affected system which indicate the actual state of the potentially affected environment, and toxicity tests with ambient media which indicate the potential effects of COPEC concentrations measured in site media.

Procedurally, the risk characterization is performed for each assessment endpoint by (1) screening all measured COPECs against toxicological benchmarks (where possible, exposure-response gradients will be developed to help ascertain a more precise understanding of the potential for impacts to receptors); (2) estimating the potential effects of the COPECs identified at the Site; (3) estimating the effects of ambient media based on the media toxicity test results (if conducted); (4) logically integrating the lines of evidence to characterize risks to the endpoint, and (5) listing and discussing the uncertainties in the assessment.

The screening of measured COPECs or of estimated biological body burdens is conducted by the mathematical comparison of a constituent concentration to an ecotoxicological benchmark. The resulting value is identified as a Hazard Quotient (HQ). HQs are calculated using the following equation:

$$HQ = \frac{\text{Media-Specific Constituent Concentration or Total Estimate of Exposure}}{\text{Ecotoxicological Benchmark (in comparable units)}}$$

If the HQ is less than, or equal to, one, then it is concluded that the potential for impacts to ecological receptors is absent or minimal. If the HQ is greater than one, then it is concluded that a *potential* for impacts to ecological receptors exists. Some authors suggest that HQs not be used as a definitive statement of the presence or absence of an ecological risk. Instead, they argue that the HQ serves as an indicator of order-of-magnitude possibilities for impacts to a receptor. Therefore, they suggest that HQs between 1 and 10 indicate only a slight possibility of an ecological risk, while an HQ in excess of 10 can indicate more a probable chance that an ecological impact will occur.

It is again cautioned that an HQ greater than one is not confirmation that an ecological risk is occurring, only indication of the potential for a risk and the need to examine other lines of evidence for confirmation. The magnitude of the exceedance over one may be related to the magnitude of the potential for impact. The level of conservatism in the benchmark, however, must be taken into consideration as a comparison of chemical data to strongly conservative benchmarks may be overprotective of the resource and exaggerate the potential for an ecological risk. As part of the comparison process, the spatial distribution of exceedances will be examined. Exceedances at a large number of sampling points will indicate the potential for more widespread risks as opposed to the exceedance at a single point which would suggest localized impacts. Calculations of HQs will take into account spatial and temporal factors.

As the exceedance of a HQ indicates the potential for an ecological impact to an individual receptor at a specific location, it is the focus of this ERA to determine the potential for ecological risks to the population. As stated in OSWER Directive 9285.7-28 P (USEPA, 1999b), “Superfund remedial actions generally should not be designed to protect organisms on an individual basis (the exception being designated protected status resources, such as listed or candidate threatened and endangered species or treaty-protected species that could be exposed to site releases), but to protect local populations and communities of biota”. To asses that potential, an estimation will be made of the population wildlife receptors at each of the Sites, based on habitat availability, home range of the organisms and size of each of the Sites.

12.8.1 Risk Characterization of the Fish Community

The characterization of risks to the fish community endpoint will be determined through the evaluation of multiple lines of evidence. These lines of evidence will be correlated in an evaluation that will potentially demonstrate relationships between the magnitude of exposure and the magnitude of effects. The lines of evidence to be used in the development of the exposure-response relationship are described below.

12.8.1.1 Surface Water Toxicity Testing

The first and strongest line of evidence is toxicity testing conducted on surface water samples collected from Site-related areas. Surface water toxicity tests will demonstrate the exposure-response relationship between the frequency of significant toxic responses and the magnitude of COPEC concentrations measured in the media. The surface water toxicity test results will be examined in relationship to the detected chemical concentrations in surface water to ascertain whether a gradient of toxicity test results can be developed in correlation to gradients in surface water concentrations. As such an exposure-response gradient should be summarized in terms of spatial distribution (Suter et al., 2000), toxicity tests will be examined longitudinally across the sampling stations (across the river) and latitudinally the length of the river. Test responses used in the surface water assessment include the survival of an invertebrate (*Ceriodaphnia dubia*) and a minnow (*Pimephales promelas*).

12.8.1.2 Analysis of Surface Water Chemical Data

The next line of evidence (both in number and in relative weight) consists of the comparison of COPEC concentrations identified in surface water samples with ecotoxicological benchmarks identified in Section 12.7.3. Concentrations of COPECs detected in surface water will be compared to the benchmarks using the HQ process described in Section 12.8.

12.8.1.3 Analysis of Fish Body Burden Data

Another line of evidence to be used in the evaluation of the fish community will be the fish tissue body burden data that is developed for the Study Area. Tissue data from Study Area fish will be

compared to tissue residue data from the literature (e.g., Jarvinen and Ankely, 1999) and to NOAEL and LOAEL benchmarks that indicate potential ecological concerns. The fish tissue data will be examined using the HQ process and the resulting values placed in a exposure-response gradient in correlation with the surface water chemical and bioassay data. Concentrations of COPECs identified in upstream fish tissue will be compared to tissue from Site-related fish in an attempt to apportion Site-related COPEC body burdens.

12.8.1.4 Analysis of Sediment Toxicity, Biological and Chemical Data

Benthic invertebrates found within Site-related sediments will be evaluated as a prey base for the fish community. Should impacts to the benthic community be detected, it is assumed that this would potentially impact the ability of the fish community to utilize this resource for food. The extent of the impacted area will be compared to the foraging ranges of fish species to evaluate potential effects of reduced prey availability. As part of the development of this line of evidence, sediment bioassays will be assessed to determine the direct toxicity of sediments to benthic invertebrates.

Toxicity testing will be conducted on sediment samples collected in accordance with the QAPP and FSP. The sediment toxicity test results will be examined in relationship to the detected chemical concentrations in sediment to ascertain whether a gradient of toxicity test results can be developed in correlation to perceived gradients in sediment concentrations. As such an exposure-response gradient should be summarized in terms of spatial distribution (Suter et al., 2000), toxicity tests will be examined longitudinally across the sampling stations (across the river) and latitudinally the length of the river. Test responses used in the sediment assessment will include the survival of two invertebrates, *Hyalella azteca* and *Chironomus tentans*.

Another line of evidence for evaluating the ability of the benthic community to serve as a prey base for the fish community will be biological surveys of the benthic community. Species richness and abundance metrics will be used in evaluating benthic communities in at the various sampling location. Metric values will be placed in context of exposure-response gradients in concert with the chemical and bioassay evaluation. *However*, great care will be taken in this evaluation as there are innumerable functions related to habitat suitability and non-chemical factors that can effect the distribution, abundance and diversity of benthic communities.

Concentrations of COPECs that are identified in Site-related sediments will be evaluated by comparison to sediment benchmarks using the HQ process described in Section 12.8.

12.8.2 Risk Characterization of Amphibians

Concentrations of COPECs in surface water within the ponds will be evaluated for the potential to impact amphibians breeding in the ponds. Concentrations of COPECs identified with the surface water of the ponds will be compared to ecotoxicological benchmarks considered to be protective of amphibians using the HQ process described in Section 12.8.

12.8.3 Risk Characterization of Piscivorous Wildlife

Risks to piscivorous wildlife will be assessed through the evaluation of a single line of evidence for the three species being evaluated. Using the exposure parameters and food-web modeling methodologies described in Section 12.7.6, fish COPEC body burden data will be utilized to determine potential exposures (ADDs) for each species. ADDs will be compared to wildlife TRVs using the HQ methodology outlined in Section 12.8.

As this assessment is based on conservative exposure parameters that may not be Site-specific, exceedance of the TRV will indicate only the potential for an adverse effect and suggest the need for further analysis to confirm that potential. The magnitude of potential exceedances and the spatial distribution of the potential exceedances will be utilized to assess whether the potential for adverse effects may be to a single endpoint organism or to the local population of that species. Both NOAEL-based TRVs and LOAEL-based TRVs will be used in the evaluation process and will be used to estimate a range of exposures that potentially may result in ecological effects to the exposed wildlife. Additional biological survey data such as the identification of an endpoint species during the field surveys or the identification of data such as Audubon Society Christmas bird counts will be compiled to further assist with the evaluation of potential population versus individual ecological risks.

12.8.4 Risk Characterization of Vermivorous Wildlife

Risks to vermivorous wildlife will be assessed through the evaluation of a single line of evidence. Using the exposure parameters and food-chain modeling methodologies described in Section 12.7.7**,** earthworm COPEC body burden data will be utilized to determine potential exposures (ADDs) for the ROI. ADDs will be compared to wildlife TRVs using the HQ methodology outlined in Section 12.8.

As this assessment is based on conservative exposure parameters that may not be site specific, exceedance of the TRV will indicate the potential for an adverse effect and suggest the need for further analysis to confirm that potential. Both NOAEL-based TRVs and LOAEL-based TRVs will be used in the evaluation process and will be used to estimate a range of exposures that potentially may result in ecological effects to the exposed wildlife.

12.8.5 Risk Characterization of Herbivorous Wildlife

Risks to herbivorous wildlife will be assessed through the evaluation of two lines of evidence. The more significant line is the analysis of potential food chain impacts to the population of herbivorous mammals in the Sites. Using the exposure parameters and food-chain modeling methodologies described in Section 12.7.6, plant tissue COPEC data will be utilized to determine hypothetical exposures (ADDs) for the ROI. ADDs will be compared to wildlife TRVs using the HQ methodology outlined in Section 12.8.

The second line of evidence will be the evaluation of the plant community to serve as both habitat and a food source to herbivorous wildlife. The evaluation of potential impacts to plants will be completed through the screening of surface soil data against soil benchmarks.

12.8.6 Risk Characterization of Carnivorous Wildlife

Risks to carnivorous wildlife will be assessed through the evaluation of a single line of evidence. Using the exposure parameters and food-chain methodologies described in Section 12.7.6, ADDs for the red fox will be calculated. ADDs will be compared to wildlife TRVs using the HQ methodology outlined in Section 12.8.

This assessment is based on conservative exposure parameters and hypothetical body burdens in prey species. As such it is considered to be a screening-level assessment. The exceedance of an HQ is only the indication of the potential for an adverse effect, and not the confirmation of one. Both NOAEL-based TRVs and LOAEL-based TRVs will be used in the evaluation process and will be used to estimate a range of exposures that potentially may result in ecological effects to the exposed wildlife. Additional analyses would be necessary to further refine the estimates of ecological risk, should they be identified in the development of this ERA.

12.8.7 Uncertainty Analysis

Following the characterization of risks, sources of uncertainty and variability within the ERA will be identified. The impact associated with these uncertainties will be qualitatively addressed. A qualitative sensitivity analyses will be conducted for the more important exposure parameters that are used in the wildlife exposure models and for the TRVs that are used to estimate risks to the representative wildlife species.

12.9 Ecological Risk Assessment Report

The findings of the ERA will be presented in a Baseline Ecological Risk Assessment (BERA) report.

12.9 References

Ables, E.D. 1974. Home range studies of red foxes (*Vulpes vulpes*). J. Mammal. 50: 108 – 120.

Abramsky, Z. and C.R. Tracy. 1980. Relation between home range size and regulation of population size in *Microtus ochrogaster*. Oikos 34: 347 – 355.

Alexander, G. 1977. Food of vertebrate predators on trout water in north central lower Michigan. Michigan Academician 10:181-195.

Barrett, G.W. and K.L. Stueck. 1976. Caloric ingestion rate and assimilation efficiency of the short-tailed shrew, *Blarina brevicauda*. Ohio J. Sci. 76:25-26.

Barnthouse, L.W., G.W. Suter II, and A.E. Rosen. 1990. Risks of toxic constituents to exploited fish populations: Influences of life history, data uncertainty, and exploitation intensity. Environmental Toxicology and Chemistry. 9:297-311.

Beyer, W.N., E. Conner, and S. Gerould. 1994. Estimates of soil ingestion by wildlife. J. Wildlife Management. 58:375-382.

Bleavins, M.R. and Aulerich, R.J. 1981. Feed consumption and food passage in mink (*Mustela vison*) and European ferrets (*Mustela putorius furo*). Lab. Anim. Sci. 31:268-269.

Brown, L. and D. Amadon. 1968. Eagles, Hawks, and Falcons of the World. McGraw-Hill, New York, NY.

Boyer, H.A. 1984. Trace elements in the water, sediments, and fish of the Upper Mississippi River, Twin Cities metropolitan area. *in* Contaminants in the Upper Mississippi River. J.G. Wiener, R.V. Anderson and D.R. McConville (eds.). Butterworth Publishers, Stoneham, MA.

Buckner, C.H. 1966. Populations and ecological relationships of shrews in Tamarack bogs of southeastern Manitoba. Journal of Mammalogy 47: 181 – 194.

Chew, R.M. 1951. The water exchanges of some small mammals. Ecological Monographs 1: 215 – 224.

Corbett, K.T. 1997. Draining the metropolis: The politics of sewers in nineteenth century St. Louis. *in* Common Fields: An environmental history of St. Louis. A. Hurley (ed.). Missouri Historical Society Press, St. Louis, MO.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service. FWS/OBS-79/31.

Craig, R.J., E.S. Mitchell, and J.E. Mitchell. 1988. Time and energy budgets of bald eagles wintering along the Connecticut River. J. Field Ornithol. 59: 22 – 32.

Crenshaw, J.G. and B.R. McCelland. 1989. Bald eagle use of a communal roost. Wilson Bulletin 101: 626 – 633.

Dice, L.R. 1922. Some factors affecting the distribution of the prairie vole, forest deer mouse, and prairie deer mouse. Ecology 3:29 – 47.

Dowd, E. and L.D. Flake. 1985. Foraging habitats and movements of nesting great blue herons in a prairie river ecosystem, South Dakota. J. Field Ornithol. 56: 379 – 387.

Dunstan, T.C. 1973. The biology of ospreys in Minnesota. Loon 45:108 – 113.

Efroymson, R.A., M.E. Will, G.W. Suter II, and A.C. Wooten. 1997. Toxicological Benchmarks for Screening Potential Constituents of Concern for Effects on Terrestrial Plants: 1997 Revision. ES/ER/TM-85/R3. Oak Ridge National Laboratory. Oak Ridge, TN.

Eisler, R. 2000a. Handbook of Chemical Risk Assessment, Health Hazards to Humans, Plants, and animals. Volume 1: Metals. Lewis Publishers. Boca Raton, FL.

Eisler, R. 2000b. Handbook of Chemical Risk Assessment, Health Hazards to Humans, Plants, and animals. Volume 2: Organics. Lewis Publishers. Boca Raton, FL.

Eisler, R. 2000c. Handbook of Chemical Risk Assessment, Health Hazards to Humans, Plants, and animals. Volume 3: Metaloids, Radiation, Cummulative Index to Chemicals and Species. Lewis Publishers. Boca Raton, FL.

Fremling, C.R., J.L. Rasmussen, R.E. Sparks, S.P.Cobb, C.F. Bryan, and T.O. Claflin. 1989. Mississippi River fisheries: A case history. *in* Proceedings of the International Large River Symposium. D.P. Dodge (ed.). Canadian Special Publication of Fisheries and Aquatic Sciences. Ottawa, Ontario.

Goolsby, D.A. and W.E. Pereira. 1995. Herbicides in the Mississippi River. *in* Contaminants in the Mississippi River, 1987-92. R.H. Meade (ed.). U.S. Geological Survey Circular 1133, Denver, Colorado.

Hellawell, J.M. 1977. Changes in Natural and managed ecosystems: detection, measurement and assessment. Proc. R. Soc. Lond. 197:31-56.

Henry, C.J. 1986. Osprey (*Pandion haliaetus*), Section 4.3.1, U.S. Army Corps of Engineers Wildlife Resources Management Manual. Prepared for the U.S. Fish and Wildlife Service, Patuxent Wildlife Research Center for U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS. Technical Report EL-86-5.

Jarvinen, A.W. and G.T. Ankley. 1999. Linkage of Effects to Tissue Residues: Development of a Comprehensive Database for Aquatic Organisms Exposed to Inorganic and Organic Chemicals. SETAC Technical Publications Series. SETAC Press.

Jike, L., G.O. Batzli, L.L. Getz. 1988. Home ranges of prairie voles as determined by radiotracking and powdertracking. J. Mammal. 69: 183 – 186.

Jones, D.S., R.N. Hull, G.W. Suter II. 1997. Toxicological Benchmarks for Screening Constituents of Potential Concern for Effects on Sediment-Associated Biota. 1997 Revision. Oak Ridge National Laboratory, Oak Ridge, TN. ES/ER/TM-95/R4.

Keenan, R.E., P.D. Anderson, W.R. Alsop, and J.H. Samuelian. 1999. Risk-based Management Principles for Evaluating Sediment Management Options. Paper prepared for the Sediment Management Work Group. http://www.smwg.org/products/.

Kushlan, J.A. 1978. Feeding Ecology of Wading Birds. *in* Wading Birds. A. Sprunt, J. Ogden, and S. Winckler (eds.). National Audubon Society Res. Rep. 7.

Long, E.R. and L.G. Morgan. 1990. The Potential for Biological Effects of Sediment-Sorbed Constituents Tested in the National Status and Trends Program. NOAA Technical Memorandum NOS OMA 5. National Oceanic and Atmospheric Administration. Washington, D.C.

Long, E.R., D.D. MacDonald, S.L. Smith, and F.D. Calder. 1995. Incidence of Adverse Biological Effects within Ranges of Chemical Concentrations in Marine and Estuarine Sediments. *Environ. Manage.* 19(1):81-97.

Menzie-Cura. 1999. Ecological Risk Assessment Work Plan for Sauget Area 1, Sauget, St. Clair County, Illinois. Menzie-Cura & Associates, Chelmsford, MA.

Missouri Department of Natural Resources. 1994. Basin 48: Mississippi River and central tributaries. State of Missouri water quality basin plan, Missouri Department of Natural Resources.

Mitchell, J.L. 1961. Mink movements and populations on a Montana river. J. Wildlife Management. 25:48-54.

Neff, J.M., B.W. Cornaby, R.M. Vaga, T.C. Gulbransen, J.A. Scanlon, and D.J. Bean. 1988. An Evaluation of the Screening Level Concentration Approach for Validation of Sediment Quality Criteria for Freshwater and Saltwater Ecosystems. *in* Aquatic Toxicology and Hazard Assessment*:* 10th Volume, ASTM STP 971. Adams, W.J., G.A. Chapman, and W.G. Landis (eds.). American Society for Testing and Materials, PA.

Palmer, R.S. 1962. Handbook of North American Birds: Vol. 1. Yale University Press, New Haven, CT.

Paustenbach, D.J. 1987. Assessing the Potential Environment and Human Health Risk of Contaminated Soil. USEPA Workshop on the Assessment of Health Risks of Contaminated Soils.

Persaud, D., R. Jaagumagi and A. Hayton. 1990. The Provincial Sediment Quality Guidelines. Ontario Ministry of the Environment.

Persaud, D., R. Jaagumagi and A. Hayton. 1993. Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario. Ontario Ministry of the Environment*,* Water Resources Branch, Watershed Management Section, Ontario, Canada.

Poole, A.F. 1983. Known effects of pollutants on fish-eating birds in the Great Lakes of North America. *in* Toxic Contamination in Large Lakes.

Quinney, T.E. 1982. Growth, diet, and mortality of nestling great blue herons. Wilson Bulletin 94: 571 – 577.

Sabine, N. 1981. Ecology of Bald Eagles Wintering in Southern Illinois. Master's Thesis. Southern Illinois University. Carbondale, IL.

Sample, B.E., D.M. Opresko and G.W. Suter II. 1996. Toxicological Benchmarks for Wildlife 1996 Revision. ES/ER/TM-86/R3.

Sample, B.E. and G.W. Suter. 1994. Estimating Exposure of Terrestrial Wildlife to Contaminants. ES/ER/TM-125.

Sargeant, A.B. 1978. Red fox prey demands and implications to waterfowl predation. J. Wildl. Manage. 36: 225-236.

Schlessinger, W.H. and G.L. Potter. 1974. Lead, copper, and cadmium concentrations in small mammals in the Hubbard Brook experimental forest. Oikos 25: 148 – 152.

Soil Conservation Service. 1987. Hydric Soils of the United States. U.S. Department of Agriculture.

Stalmaster, M.V. and J.A. Gessaman. 1984. Ecological energetics and foraging behavior of overwintering bald eagles. Ecological Monograph 54: 407 – 428.

Storm, G.L., R.D. Andrews, R.L. Phillips, R.A. Bishop, D.B. Siniff, and J.R. Tester. 1976. Morphology, reproduction, dispersal, and mortality of midwestern red fox populations. Wildlife Monograph.

Suter, G.W. II. 1996. Toxicological Benchmarks for Screening Constituents of Potential Concern for Effects on Freshwater Biota. Environmental Toxicology and Chemistry. Vol. 15, No. 7.

Suter, G.W. II., and J.B. Mabrey. 1994. Toxicological Benchmarks for Screening of Potential Constituents of Concern for Effects on Aquatic Biota: 1994 Revision. Oak Ridge National Laboratory, Oak Ridge, TN. ES/ER/TM-96/R1.

Suter, G.W. II, R. A. Efroymson, B.E. Sample, and D.S. Jones. 2000. Ecological Risk Assessment for Contaminated Sites. Lewis Publishers, Boca Raton, FL.

Suter, G.W. II., et al. 1987. Endpoints for responses of fish to chronic toxic exposures. Environ. Toxicol. Chem. 6: 793-809.

Talmage, S.S. and B.T. Walton. 1993. Food chain transfer and potential renal toxicity to small mammals at a contaminated terrestrial field site. Ecotoxicology 2: 243 – 256.

Travis, C.C. and A.D. Arms. 1988. Bioconcentration of Organics in Beef, Milk, and Vegetation. *Environmental Science and Technology*, Vol. 22(3):271-274.

Travis, C.C. and R.K. White. 1988. Interspecific Scaling of Toxicity Data. *Risk Analysis* 8:119-125.

Travis, C.C., R.K. White, and R.C. Wards. 1990. Interspecies Extrapolation of Pharmacokinetics. *J. Theor. Biol*. 142:285-304.

USEPA. 1989. Risk Assessment Guidance for Superfund, Volume II, Environmental Evaluation Manual, Interim Final. EPA/540/1-89/001. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, DC.

USEPA. 1992a. Framework for Ecological Risk Assessment. Risk Assessment Forum. EPA 630/R-92-001. Washington, D.C.

USEPA. 1992b. Draft Report: A cross-species scaling factor for carcinogen risk assessment based on equivalence of mg/kg $^{3/4}$ / day; Notice. *Federal Register*. 57 (109)24152-24173.

USEPA. 1993. Wildlife Exposure Factors Handbook. EPA/600/R-93/187a. Office of Research and Development. Washington, D.C.

USEPA. 1994. Interim Draft Ecological Risk Assessment Guidance for RCRA Corrective Action. U.S. Environmental Protection Agency, Chicago, IL.

USEPA. 1995. Water Quality Guidance for the Great Lakes System: Supplementary Information Document (SID). Office of Water. EPA-820-B-95-001. March 1995.

USEPA. 1996. ECO Update, Ecotox Thresholds. Publication 9345.0-12FSl, EPA 540/F-95/038-PB95-963324.Vol. 3, No. 2.

USEPA. 1997a. Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments. EPA 540-R-97-006. Washington, D.C.

USEPA. 1997b. Preliminary Ecological Risk Assessment for Sauget Area 2, Site Q, Sauget, St. Clair County, Illinois. Ecology and Environment, Chicago, IL.

USEPA. 1998a. Guidelines for Ecological Risk Assessment. EPA/630/R-95/002F. Washington, D.C.

USEPA. 1998b. The Incidence and Severity of Sediment Contamination in Surface Waters of the United States. Volume 1: National Sediment Quality Survey. USEPA OST. EPA 823-R97-006.

USEPA. 1999a. Issuance of Final Guidance: Ecological Risk Assessment and Risk Management Principles for Superfund Sites. Office of Solid Waste and Emergency Response. OSWER Directive 9285.7-28 P. Washington, D.C.

USEPA. 1999b. Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities. EPA530-D-99-001A. Washington, D.C.

USEPA. 2000. Draft Ecological Soil Screening Level Guidance. Office of Emergency and Remedial Response, Washington, D.C.

USFS. 1988. National List of Plant Species that Occur in Wetlands: North Central (Region 3). U.S. Fish and Wildlife Service Biological Report.

USGS. 1999. Ecological Status and Trends of the Upper River Mississippi River System 1998: A Report of the Long Term Resource Monitoring Program. U.S. Geological Survey, Upper Midwest Environmental Sciences Center, La Crosse, WI.

Van den Berg, M., L. Birnbaum, A.T.C. Bosveld, B. Brunstrom, P. Cook, M. Feeley, J. P. Giesy, a. Hanberg, R. Hasegawa, S.W. Kennedy, T. Kubiak, J.C. Larsen, F.X.R. van Leeuwen, A.K. D. Liem, C. Nolt, R.E. Peterson, L. Poellinger, S. Safe, D. Schrenk, D. Tillitt, M. Tysklind, M. Younes, F. Waern, and T. Zacharewski. 1998. Toxic equivalency factors (TEFs) for PCBs, PCDDs, PCDFs for humans and wildlife. Environ. Health Perspec. 106:775-792.

Vaughn, T.A. Mammalogy. Saunders College Publishing, Philadelphia, PA.

Vogtsberger, L.M. and G.W. Barrett. 1973. Bioenergetics of captive red foxes. Journal of Wildlife Management 37: 495 – 500.

Whitaker, J.O. and M.G. Ferraro. 1963. Summer food of 220 short-tailed shrews from Ithaca, New York. Journal of Mammalogy 44:419.

Will M.E. and G.W. Suter II. 1995. Toxicological Benchmarks for Screening Potential Constituents of Concern for Effects on Terrestrial Plants: 1995 Revision. ES/ER/TM-85/R2. Oak Ridge National Laboratory. Oak Ridge, TN.

Appendix I-B

Representative Photographs of Disposal Areas

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REVISED BASELINE
ECOLOGICAL RISK ASSESSMENT

SAUGET AREA 2 SITES
(SITES O, P, Q, R, S)
SAUGET, ILLINOIS

VOLUME II

AQUATIC ASSESSMENT TABLES
AQUATIC ASSESSMENT FIGURES
AQUATIC ASSESSMENT APPENDICES

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Table 3-1. Latitudes and longitudes (GPS Coordinates) of aquatic sampling locations in 2002.

Site ID	Latitute	Longitude	Comments
Pond Sampling Location			
P1	38.35' 12.0"	90.12' 2.5"	(Pond near Site Q)
Riverine Sampling Location			
R1BU	38. 37' 0.7"	90.10' 50.7"	
R1AU	38.37' 1.2"	90.10' 49.7"	
RICM	38.36' 58.5"	90.10' 52.0"	Bank lat:38.36' 57.9" and
RIBM	38.36' 58.1"	90.10' 49.4"	long: 90.10' 47.4"
R1AD	38.36' 54.1"	90.10' 51.7"	
R1BD	38.36' 53.5"	90.10' 52.1"	
R1AM	38.36' 54.4"	90.10' 52.1"	
R2BU	38.36' 26.0"	90.11' 0.4"	Bank lat:38.36' 26" and
R2AU	38.36' 26.3"	90.11' 1.2"	long: 90.11' 0.4"
R2CM	38.36' 22.7"	90.11' 5.9"	
R2BM	38.36' 22.2"	90.11' 4.2"	
R2AM	38.36' 20.7"	90.11' 5.1"	
R2BD	38.36' 19.7"	90.11' 5.0"	
R2AD	38.36' 19.5"	90.11' 4.9"	
R3BU	38.35' 48.3"	90.11' 24.8"	
R3AU	38.35' 47.8"	90.11' 23.4"	
R3CM	38.35' 45.8"	90.11' 28.8"	
R3BM	38.35' 44.8"	90.11' 26.8"	
R3AM	38.35' 44.9"	90.11' 25.3"	
R3BD	38.35' 26.5"	90.11' 42.0"	
R3AD	38.35' 26.5"	90.11' 42.0"	
R4BU	38.35' 26.3"	90.11' 42.0"	
R4AD	38.35' 10.8"	90.12' 5.6"	
R4BD	38.35' 23.2"	90.11' 48.0"	
R4AM	38.35' 24.4"	90.11' 43.7"	Bank lat:38.35' 24" and
R4BM	38.35' 23.7"	90.11' 43.5"	long: 90.11' 43.1"
R4CM	38.35' 24.4"	90.11' 44.0"	
R4AU	38.35' 25.5"	90.11' 41.2"	
R5BN	38.35' 11.8"	90.12' 2.5"	
R5AN	38.35' 11.1"	90.12' 2.1"	Bank lat:38.35' 9.4" and
R5AU	38.35' 9.7"	90.12' 5.2"	long: 90.12' 7.6"
R5AM	38.35' 7.7"	90.12' 7.7"	
R5BD	38.35' 6.9"	90.12' 11.9"	Sediment samples not collected
R5AD	38.35' 6.1"	90.12' 11.2"	Sediment samples not collected
R5CM	38.35' 9.7"	90.12' 9.3"	
R5BM	38.35' 8.4"	90.12' 8.5"	
R5BU	38.35' 10.7"	90.12' 5.5"	

Table 3-1. Latitudes and longitudes (GPS Coordinates) of aquatic sampling locations in 2002.

Site ID	Latitute	Longitude	Comments
Riverine Sampling Locations (Contd.)			
R6CM	38.35' 2.6"	90.12' 22.3"	
R6BM	38.35' 1.6"	90.12' 20.8"	
R6AM	38.35' 1.1"	90.12' 19.8"	
R6BU	38.35' 2.1"	90.12' 18.2"	
R6AU	38.35' 2"	90.12' 18.3"	
R6BD	38.35' 0.4"	90.12' 22.0"	**Sampling Cancelled; no samples collected**
R6AD	38.35' 0.4"	90.12' 21.1"	Bank lat: 38.36'3.3" and long: 90.11' 16"

Site ID Key for Riverine Sampling Locations:

Each Location is identified by a 4-digit code: The **first digit** "R" stands for "River" (vs. "P" for "Pond"). The **second digit** (numbers 1-6) refers to the 6 plot areas marked on the map, 1 being the most upstream plot, and 6 the most downstream plot. The **third digit** (A, B, or C) refers to the three transects within each plot area, where A transect is 50' from shore, B transect is 150' from shore, and C transect is 300' from shore into the river. The **fourth digit** (D, M, or U) refers to upstream or downstream sampling site within each transect - "D" being the downstream sampling location, "M" being the midstream location, and "U" being the upstream location (the exceptions are in plot R5, where samples were collected at two additional locations north ("N") of the "U" site and are marked R5BN and R5AN, respectively). Note that the 300' site ("C") is only applicable for mid-stream location ("M").

Example: R3BD refers to the Riverine sampling, third plot area (located immediately below Site R), located approx. 150' from shore, and is in the downstream third of the plot)

Table 3-2. Field observations of sediment samples and benthic invertebrates at sampling locations in 2002.

Site ID	Grain Size	Sediment Condition	Sediment Organisms
R6AD	Mostly silt with some clay (fluid mud not sticky) and little sand	Dark oaky brown sediment, slight organic odor, high organic carbon	Found Hexagenia (mayfly larvae), sieved 5-L of sediments for benthic invertebrate identification
R6AU	More clay than silt, <2% sand	Brown, slight organic odor, high organic carbon	None found
R6BU	Silt with some clay, slightly sticky	Brown, slight organic odor, coal particles, some organic carbon	None found
R6AM	Silt with some clay, <5% sand	Dark gray and brown with coal particles, organic odor, some organic carbon	None found
R6BM	Fine sand and silt	Light gray, low organic carbon, iron odor, some coal particles	None found
R6CM	Medium to coarse sand with small gravels	Low organic matter, some coal, no odor	None found
R5AD	Sediment samples not collected	NA	None found
R5BD	Sediment samples not collected	NA	None found
R5AM	Fine sand with silt, some lumps of clay	Dark oaky brown, no odor, low organic carbon	None found
R5AU	Very fine silt and clay in top 1", fine to medium sand below	Dark oaky brown, no odor, low organic carbon	None found
R5CM	Medium to coarse sand	Very low organic carbon, no odor, medium brown	None found
R5BM	Fine to medium sand, some silt	Medium brown, slight biological odor, low organic carbon	None found
R5BU	Fine silt with clay in top 1", fine to medium sand below	Grayish brown, oil sheen, no odor, high organic carbon	None found
R5AN	Silty clay in the top 1/2", silty sand below	Dark gray in top 1/2" with decay odor, remainder was gray with no odor, some organic carbon	None found
R5BN	Silty clay at top 1", coarser below	Dark brown and gray, some organic matter, decay odor	None found
R4AD	Fine to medium sand with some gravel	Broken shells on top layer, no odor, low organic carbon	None found
R4BD	Medium to coarse sand, homogeneous	Low organic carbon, no odor	None found
R4AM	Fine to medium sand with small pebbles	Low organic carbon, no odor	Zebra mussels attached to some larger rocks obtained in sediment grabs
R4BM	Medium to coarse sand, some silt	Low organic carbon, homogeneous, no odor	None found
R4CM	Medium to coarse sand with some large stones on top layer	Top layer brown, more gray towards bottom, well sorted	Zebra mussel shell fragments
R4AU	Medium to coarse sand with gravel	Brown in top 1/2", gray below, low organic carbon	None found
R4BU	Medium to coarse sand, well sorted	Low organic matter, no odor	No organisms, some shells

Table 3-2. Field observations of sediment samples and benthic invertebrates at sampling locations in 2002.

Site ID	Grain Size	Sediment Condition	Sediment Organisms
R3AD	Fine to medium sand in top, coarse sand below	Some organic carbon, wood fragments, petroleum odor	None found
R3BD	Coarse sand, well sorted, grains rounded	Tan color, clean, no odor, very low organic carbon	None found
R3AM	Fine silty sand with some clay	Dark gray, darker color with depth, smell of decomposition and hydrocarbons, twigs	None found
R3BM	Fine silty sand and clay in top 2", medium coarse sand with silt below	Dark gray, no odor, low organic carbon	Shells fragments, no living organisms
R3CM	Coarse sand, well sorted, rounded	Brown, no odor, very low organic carbon	None found
R3AU	Silty clay with some fine sand	High organic carbon, decomposition odor, dark brown, dark gray	Possible tracks of burrowing organisms, no living organisms found
R3BU	Silty clay in top 1", coarse sand below	Substantial organic matter and dark gray in top 1"; no organic matter and brown below	None found
R2AD	Sticky clay with small silt and low sand	Some organic matter, gray	None found
R2BD	Silty sand, as well as fine to medium gravel	Some organic matter, brown, no odor	Catisfly larvae on larger rocks (not in sediments)
R2AM	Silt with fine sand	Some organic carbon, dark gray, slight decomposition odor, twigs in sediments	None found
R2BM	Medium sand, sorted, rounded	Very low organic carbon, tan, no odor	None found
R2CM	Medium to coarse sand, sorted	Very low organic carbon, tan, no odor	None found
R2AU	Fine sand, well sorted	Very low organic carbon, brown, no odor	None found
R2BU	Fine to medium sand, well sorted	Low organic carbon, gray, no odor	None found
R1AD	Silty clay with some fine sand	Some organic carbon, dark gray, hydrocarbon odor	Zebra mussel shells
R1BD	Silty clay with some fine sand	Gray, no odor, some organic carbon	Corbicula (Asiatic clam) in sediments; 10-L of sediments sieved for benthics
R1AM	Fine to medium sand with some silt	Some organic matter, dark gray, no odor	Shell fragments
R1BM	Coarse sand with gravel, well sorted	Some organic matter, tan, no odor	Catisfly larvae attached to large rocks obtained in grab; Zebra mussels, Clanaria
R1CM	Coarse sand with gravel	Low organic matter, tan, no odor	Shell fragments only
R1AU	Medium to coarse sand with gravel	Some organic matter, tan to gray, no odor	Shell fragments, Odinada (damsel fly)
R1BU	Coarse sand with gravel, clean, well sorted	Low organic matter, tan, no odor	None found
P1	Silty clay, sticky	Some organic matter, dark gray, sticky	None found

Table 3-3. Field-measured water quality parameters of surface water at aquatic sampling locations in 2002.

Site ID	Bottom						Mid-depth						Surface					
	Depth	Cond.	pH	DO	Temp.	Turbidity	Depth	Cond.	pH	DO	Temp.	Turbidity	Depth	Cond.	pH	DO	Temp.	Turbidity
	ft	mS/cm		mg/L	°C	NTU	ft	mS/cm		mg/L	°C	NTU	ft	mS/cm		mg/L	°C	NTU
R6AD	16	0.434	7.80	11.5	8.0	50	8	0.433	7.95	11.7	8.0	40	1	0.432	8.30	11.7	8.0	50
R6AU	16	0.433	7.70	11.7	8.0	35	8	0.431	8.10	11.7	8.0	26	1	0.429	8.40	11.7	8.0	26
R6BU	30	0.429	8.00	12.1	8.1	30	15	0.428	8.40	11.9	8.1	26	1	0.427	8.30	11.9	8.1	28
R6AM	15	0.430	7.50	11.9	7.8	36	8	0.428	8.31	11.8	7.8	31	1	0.428	8.36	11.9	7.8	36
R6BM	33	0.432	7.71	12.7	7.9	30	16	0.434	8.34	12.0	8.0	28	0	0.433	8.36	12.0	8.0	26
R6CM	31	0.430	8.04	12.4	8.1	27	16	0.432	8.38	12.1	8.1	26	0	0.430	8.43	12.0	8.1	23
R5AD	5	0.439	7.90	12.3	8.3	23	3	0.435	8.04	12.1	8.3	27		0.434	8.07	12.1	8.3	27
R5BD	13	0.465	7.51	11.8	7.9	189	6	0.465	8.15	11.8	7.9	150	0	0.461	8.40	11.7	7.9	169
R5AM	2	0.463	8.05	11.8	8.1	20	1.5	0.461	8.38	11.6	8.2	28	0	0.460	8.22	11.6	8.2	24
R5AU	4	0.473	8.27	12.1	8.2	50	2	0.471	8.13	12.0	8.2	27	0	0.470	8.14	12.0	8.2	25
R5CM	27	0.431	7.40	13.5	8.2	33	13	0.430	8.37	12.6	8.2	32	0	0.430	8.21	12.4	8.3	33
R5BM	17	0.436	8.08	12.8	8.3	34	8	0.437	8.53	12.4	8.3	30	0.5	0.438	8.43	12.4	8.4	30
R5BU	19	0.437	8.02	13.1	8.5	38	10	0.436	8.39	12.8	8.5	24	0.0	0.438	8.56	12.7	8.5	25
R5AN	9	0.475	8.14	13.1	8.3	29	5	0.476	8.25	14.1	8.3	59	1	0.475	8.38	14.2	8.3	73
R5BN	16	0.471	8.12	13.6	8.3	24	8	0.471	8.41	14.1	8.3	22	1	0.469	8.43	14.2	8.3	20
R4AD	15	0.466	7.21	12.5	9.0	55	8	0.462	8.24	11.8	9.0	59	0	0.458	8.40	11.9	9.0	46
R4BD	11	0.444	8.20	12.2	9.0	38	5	0.450	8.37	11.9	9.0	31	1	0.451	8.52	11.9	9.0	34
R4AM	10	0.468	8.20	12.1	9.1	29	5	0.464	8.13	11.8	9.1	30	1	0.462	8.23	11.7	9.1	31
R4BM	10	0.445	7.83	12.6	8.7	159	5	0.449	8.34	12.6	8.8	122	1	0.444	8.17	12.6	8.8	117
R4CM	13	0.422	7.87	12.6	8.8	27	7	0.432	8.32	12.7	8.8	25	1	0.429	8.28	12.6	8.8	24
R4AU	5	0.464	7.92	12.8	9.2	24	3	0.464	8.19	12.8	9.2	23	1	0.463	8.35	12.7	9.2	23
R4BU	9	0.468	7.85	12.6	9.3	20	5	0.473	8.39	12.8	9.3	21	1	0.474	8.38	12.7	9.3	21
R3AD	8	0.471	7.72	12.2	8.8	24	4	0.468	8.01	12.3	8.8	22	1	0.467	8.33	12.3	8.8	26
R3BD	14	0.455	8.09	12.3	8.9	31	7	0.453	8.39	12.6	8.9	26	1	0.452	8.38	12.6	8.9	28
R3AM	13	0.463	8.09	12.3	9.0	25	6	0.461	8.38	12.4	9.1	25	1	0.459	8.36	12.4	9.1	29
R3BM	12	0.463	7.93	12.4	9.1	25	6	0.457	8.44	12.4	9.1	24	1	0.457	8.35	12.4	9.1	24
R3CM	12	0.451	8.11	12.4	8.6	26	6	0.455	8.44	12.5	8.6	25	1	0.454	8.39	12.5	8.7	26
R3AU	16	0.474	8.05	12.3	8.7	421	8	0.481	8.16	12.1	8.7	48	1	0.471	8.19	12.1	8.7	57
R3BU	4	0.467	8.26	12.5	8.8	25	2	0.463	8.07	12.5	8.8	31	1	0.463	8.26	12.4	8.9	3
R2AD	11	0.447	8.25	12.9	9.0	19	5	0.442	8.39	12.6	9.0	26	1	0.442	8.47	12.6	9.0	23
R2BD	19	0.448	7.85	12.9	9.1	23	10	0.445	8.43	12.6	9.1	23	1	0.445	8.37	12.5	9.1	24
R2AM	14	0.455	8.03	12.4	8.7	48	7	0.453	8.39	12.1	8.7	34	1	0.451	8.38	12.1	8.7	33
R2BM	19	0.455	7.93	12.2	8.8	27	10	0.454	8.36	12.2	8.8	32	1	0.447	8.36	12.2	8.8	28
R2CM	18	0.457	8.08	12.3	8.8	--	9	0.454	8.50	12.4	8.8	21	1	0.453	8.44	12.3	8.9	19
R2AU	5	0.462	8.16	12.7	9.1	25	3	0.456	8.25	12.3	9.1	29	1	0.456	8.45	12.3	9.1	28
R2BU	20	0.446	7.80	11.7	8.9	19	11	0.444	8.42	11.8	8.9	27	1	0.441	8.37	11.7	8.9	26
R1AD	10	0.445	8.00	11.6	8.9	13	5	0.443	8.41	11.9	8.9	17	1	0.442	8.36	11.9	8.9	17
R1BD	28	0.439	7.90	11.9	8.9	13	14	0.442	8.43	12.0	8.9	19	1	0.440	8.42	12.0	8.9	16
R1AM	1	0.437	8.05	11.8	8.8	20							1					
R1BM	20	0.445	7.89	12.1	8.4	28	10	0.433	8.41	12.4	8.4	29	1	0.433	8.40	12.4	8.4	28
R1CM	23	0.431	7.77	12.2	8.5	219	12	0.431	8.39	12.6	8.6	121	1	0.429	8.41	12.6	8.6	101
R1AU	25	0.428	7.86	12.2	8.6	24	13	0.427	8.49	12.4	8.6	25	1	0.429	8.31	12.4	8.6	25
R1BU	27	0.469	7.90	14.1	8.2	32	14	0.466	8.36	14.5	8.2	34	1	0.461	8.32	14.4	8.2	51
P1	--													0.366	8.67	13.5	7.8	>1000

Table 3-4. Calculation of sediment TCDD-TEQs from individual Dioxin/Furan congener concentrations

Dioxins/Furans

Sample ID	CAS	Analyte	Units	Result	Qualifier	Reporting Limit	Risk Conc	2,3,7,8-TCDD TEF-Fish	2,3,7,8-TCDD TEQ	TEQ Total
R1BM1S	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.0011	U	0.0011	0.00055	0.001	0.00000055	
R1BM1S	67562-39-4	1,2,3,4,6,7,8-HpCDF	ug/kg	0.00091	U	0.00091	0.000455	0.01	0.00000455	
R1BM1S	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.00051	U	0.00051	0.000255	0.05	0.00001275	
R1BM1S	3268-87-9	OCDD	ug/kg	0.012	J	0.000033	0.012	0.0001	0.0000012	
R1BM1S	39001-02-0	OCDF	ug/kg	0.0013	U	0.0013	0.00065	0.0001	0.000000065	0.000019115
R1BM2S	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.0024	U	0.0024	0.0012	0.001	0.0000012	
R1BM2S	67562-39-4	1,2,3,4,6,7,8-HpCDF	ug/kg	0.00039	U	0.00039	0.000195	0.01	0.00000195	
R1BM2S	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.00031	U	0.00031	0.000155	0.05	0.00000775	
R1BM2S	3268-87-9	OCDD	ug/kg	0.035	J	0.000033	0.035	0.0001	0.0000035	
R1BM2S	39001-02-0	OCDF	ug/kg	0.0006	U	0.0006	0.0003	0.0001	0.00000003	0.00001443
R2BM1S	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.0014	U	0.0014	0.0007	0.001	0.0000007	
R2BM1S	67562-39-4	1,2,3,4,6,7,8-HpCDF	ug/kg	0.00059	U	0.00059	0.000295	0.01	0.00000295	
R2BM1S	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.00031	U	0.00031	0.000155	0.05	0.00000775	
R2BM1S	3268-87-9	OCDD	ug/kg	0.024	J	0.000033	0.024	0.0001	0.0000024	
R2BM1S	39001-02-0	OCDF	ug/kg	0.0012	U	0.0012	0.0006	0.0001	0.00000006	0.00001386
R3BM1S	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.055		0.0011	0.055	0.001	0.000055	
R3BM1S	67562-39-4	1,2,3,4,6,7,8-HpCDF	ug/kg	0.0077		0.00039	0.0077	0.01	0.000077	
R3BM1S	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.0011	J	0.00021	0.0011	0.05	0.000055	
R3BM1S	3268-87-9	OCDD	ug/kg	1.8		0.000033	1.8	0.0001	0.00018	
R3BM1S	39001-02-0	OCDF	ug/kg	0.036		0.0006	0.036	0.0001	0.0000036	0.0003706
R4BM1S	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.025		0.0011	0.025	0.001	0.000025	
R4BM1S	67562-39-4	1,2,3,4,6,7,8-HpCDF	ug/kg	0.0038	J	0.00039	0.0038	0.01	0.000038	
R4BM1S	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.00021	U	0.00021	0.000105	0.05	0.00000525	
R4BM1S	3268-87-9	OCDD	ug/kg	0.39	J	0.000033	0.39	0.0001	0.000039	
R4BM1S	39001-02-0	OCDF	ug/kg	0.028		0.0006	0.028	0.0001	0.0000028	0.00011005
R5BM1S	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.002	U	0.002	0.001	0.001	0.000001	
R5BM1S	67562-39-4	1,2,3,4,6,7,8-HpCDF	ug/kg	0.0007	U	0.0007	0.00035	0.01	0.0000035	
R5BM1S	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.00025	U	0.00025	0.000125	0.05	0.00000625	
R5BM1S	3268-87-9	OCDD	ug/kg	0.047	J	0.000033	0.047	0.0001	0.0000047	
R5BM1S	39001-02-0	OCDF	ug/kg	0.0016	U	0.0016	0.0008	0.0001	0.00000008	0.00001553
R6BM1S	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.011		0.0011	0.011	0.001	0.000011	
R6BM1S	67562-39-4	1,2,3,4,6,7,8-HpCDF	ug/kg	0.0014	U	0.0014	0.0007	0.01	0.000007	
R6BM1S	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.00044	U	0.00044	0.00022	0.05	0.000011	
R6BM1S	3268-87-9	OCDD	ug/kg	0.25	J	0.000033	0.25	0.0001	0.000025	
R6BM1S	39001-02-0	OCDF	ug/kg	0.008	J	0.0006	0.008	0.0001	0.0000008	0.0000548

Table 3-4. Calculation of sediment TCDD-TEQs from individual Dioxin/Furan congener concentrations

PCBs

Sample ID	CAS	Analyte	Units	Result	Qualifier	Reporting Limit	Risk Conc	Total PCBs
R3AD1S	C-DICHLOROBI	Dichlorobiphenyl	ug/kg	1	J	0.1	1	
R3AD1S	C-MONOCHLORO	Monochlorobiphenyl	ug/kg	3.6	J	0.1	3.6	
R3AD1S	C-NONACHLORO	Nonachlorobiphenyl	ug/kg	22	U	22	11	
R3AD1S	C-PENTBIPHEN	Pentachlorobiphenyl	ug/kg	8.6	U	8.6	4.3	
R3AD1S	C-TRICHLOROB	Trichlorobiphenyl	ug/kg	0.96	J	0.1	0.96	20.86
R3AM1S	C-DICHLOROBI	Dichlorobiphenyl	ug/kg	1.7	J	0.1	1.7	
R3AM1S	C-MONOCHLORO	Monochlorobiphenyl	ug/kg	2.9	J	0.1	2.9	
R3AM1S	C-NONACHLORO	Nonachlorobiphenyl	ug/kg	28	U	28	14	
R3AM1S	C-PENTBIPHEN	Pentachlorobiphenyl	ug/kg	11	U	11	5.5	
R3AM1S	C-TRICHLOROB	Trichlorobiphenyl	ug/kg	1.1	J	0.1	1.1	25.2
R3AU1S	C-DICHLOROBI	Dichlorobiphenyl	ug/kg	5.4	U	5.4	2.7	
R3AU1S	C-MONOCHLORO	Monochlorobiphenyl	ug/kg	1.2	J	0.1	1.2	
R3AU1S	C-NONACHLORO	Nonachlorobiphenyl	ug/kg	28	U	28	14	
R3AU1S	C-PENTBIPHEN	Pentachlorobiphenyl	ug/kg	11	U	11	5.5	
R3AU1S	C-TRICHLOROB	Trichlorobiphenyl	ug/kg	1.2	J	0.1	1.2	24.6
R3BM1S	C-DICHLOROBI	Dichlorobiphenyl	ug/kg	14		0.1	14	
R3BM1S	C-MONOCHLORO	Monochlorobiphenyl	ug/kg	29		0.1	29	
R3BM1S	C-NONACHLORO	Nonachlorobiphenyl	ug/kg	12	J	0.5	12	
R3BM1S	C-PENTBIPHEN	Pentachlorobiphenyl	ug/kg	4.4	J	0.2	4.4	
R3BM1S	C-TRICHLOROB	Trichlorobiphenyl	ug/kg	10		0.1	10	69.4
R4BM1S	C-DICHLOROBI	Dichlorobiphenyl	ug/kg	3.9	U	3.9	1.95	
R4BM1S	C-MONOCHLORO	Monochlorobiphenyl	ug/kg	3.9	U	3.9	1.95	
R4BM1S	C-NONACHLORO	Nonachlorobiphenyl	ug/kg	8.9	J	0.5	8.9	
R4BM1S	C-PENTBIPHEN	Pentachlorobiphenyl	ug/kg	8	U	8	4	
R4BM1S	C-TRICHLOROB	Trichlorobiphenyl	ug/kg	3.9	U	3.9	1.95	18.75

Table 3-5. Concentrations and frequency of detection of 2002 sediment COPECs retained after initial screening.

CAS	Chemical Class	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
95-50-1	VOCs	1,2-Dichlorobenzene	ug/kg	365	217	3/36	8.3%	250	194	0/8	0.0%
78-93-3	VOCs	2-Butanone (MEK)	ug/kg	26	7.6	5/38	13%	8.5	6.7	1/8	13%
67-64-1	VOCs	Acetone	ug/kg	290	25	32/38	84%	98	32	7/8	88%
71-43-2	VOCs	Benzene	ug/kg	49	3.9	4/38	11%	1.7	1.4	0/8	0.0%
108-90-7	VOCs	Chlorobenzene	ug/kg	11000	457	8/38	21%	1.7	1.4	0/8	0.0%
100-41-4	VOCs	Ethylbenzene	ug/kg	16	2.5	27/38	71%	1.7	1.4	0/8	0.0%
100-42-5	VOCs	Styrene (Monomer)	ug/kg	37	2.7	4/38	11%	1.7	1.4	0/8	0.0%
108-88-3	VOCs	Toluene	ug/kg	14	2.6	12/38	32%	1.7	1.4	0/8	0.0%
1330-20-7	VOCs	Xylenes, Total	ug/kg	81	12	34/38	89%	5.5	3.5	1/8	13%
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg	365	213	3/36	8.3%	250	194	0/8	0.0%
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg	365	199	6/36	17%	250	194	0/8	0.0%
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg	365	214	3/36	8.3%	250	194	0/8	0.0%
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg	365	197	6/36	17%	250	194	0/8	0.0%
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg	365	197	6/36	17%	250	194	0/8	0.0%
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	365	197	6/36	17%	250	194	0/8	0.0%
218-01-9	SVOCs	Chrysene	ug/kg	360	179	8/36	22%	220	166	1/8	13%
206-44-0	SVOCs	Fluoranthene	ug/kg	360	199	5/36	14%	220	145	2/8	25%
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg	385	221	2/36	5.6%	250	194	0/8	0.0%
106-47-8	SVOCs	P-Chloroaniline	ug/kg	3000	558	2/36	5.6%	500	389	0/8	0.0%
87-86-5	SVOCs	Pentachlorophenol	ug/kg	19	10	6/35	17%				
85-01-8	SVOCs	Phenanthrene	ug/kg	365	210	3/36	8.3%	220	167	1/8	13%
72-54-8	Pesticides	4,4'-DDD	ug/kg	4.4	2.4	2/36	5.6%	2.5	1.9	0/8	0.0%
72-55-9	Pesticides	4,4'-DDE	ug/kg	4.9	2.0	10/36	28%	2.2	1.9	0/7	0.0%
50-29-3	Pesticides	4,4'-DDT	ug/kg	7.7	2.6	3/34	8.8%	2.2	1.8	0/6	0.0%
319-85-7	Pesticides	beta-BHC	ug/kg	2.3	1.2	2/36	5.6%	1.3	1.0	0/8	0.0%
60-57-1	Pesticides	Dieldrin	ug/kg	4.4	2.4	3/37	8.1%	2.5	1.9	0/8	0.0%
7421-93-4	Pesticides	Endrin Aldehyde	ug/kg	4.4	2.4	10/36	28%	2.5	1.9	0/8	0.0%
53494-70-5	Pesticides	Endrin Ketone	ug/kg	4.4	2.0	9/36	25%	2.5	1.9	0/8	0.0%
5103-74-2	Pesticides	gamma-Chlordane	ug/kg	3.0	1.2	7/36	19%	1.3	1.0	0/8	0.0%
76-44-8	Pesticides	Heptachlor	ug/kg	2.3	1.2	5/36	14%	1.3	1.0	0/8	0.0%
1024-57-3	Pesticides	Heptachlor Epoxide	ug/kg	11	1.5	3/38	7.9%	1.3	1.0	0/8	0.0%
72-43-5	Pesticides	Methoxychlor	ug/kg	40	13	3/36	8.3%	13	10	0/8	0.0%
94-75-7	Herbicides	2,4-D	ug/kg	20	7.1	5/37	14%	5.2	5.2	1/1	100%
75-99-0	Herbicides	Dalapon	ug/kg	2200	1281	2/25	8.0%				
120-36-5	Herbicides	Dichlorprop	ug/kg	115	66	2/35	5.7%	23	18	5/5	100%
93-65-2	Herbicides	MCPP	ug/kg	2500	1391	2/35	5.7%	460	415	2/2	100%
C-DICHLOROBI	PCBs	Dichlorobiphenyl	ug/kg	14	2.5	3/38	7.9%	2.5	1.9	0/8	0.0%
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/kg	29	3.0	4/38	11%	2.5	1.9	0/8	0.0%
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/kg	19	12	2/38	5.3%	13	10	0/8	0.0%
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/kg	10	2.4	4/38	11%	2.5	1.9	0/8	0.0%
35822-46-9	Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.055	0.019	3/5	60%	0.0012	0.00088	0/2	0.0%
67562-39-4	Dioxins	1,2,3,4,6,7,8-HpCDF	ug/kg	0.0077	0.0026	2/5	40%	0.000455	0.00033	0/2	0.0%
51207-31-9	Dioxins	2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.0011	0.00034	1/5	20%	0.000255	0.00021	0/2	0.0%
3268-87-9	Dioxins	OCDD	ug/kg	1.8	0.50	5/5	100%	0.035	0.024	2/2	100%
39001-02-0	Dioxins	OCDF	ug/kg	0.036	0.015	3/5	60%	0.00065	0.00048	0/2	0.0%
37871-00-4	Dioxins	Total HpCDD	ug/kg	0.13	0.041	3/5	60%	0.0027	0.0016	1/2	50%
38998-75-3	Dioxins	Total HpCDF	ug/kg	0.029	0.011	3/5	60%	0.00050	0.00036	0/2	0.0%

Table 3-5. Concentrations and frequency of detection of 2002 sediment COPECs retained after initial screening.

CAS	Chemical Class	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
34465-46-8	Dioxins	Total HxCDD	ug/kg	0.015	0.0034	1/5	20%	0.00065	0.00049	0/2	0.0%
55684-94-1	Dioxins	Total HxCDF	ug/kg	0.0046	0.0013	1/5	20%	0.00070	0.00052	0/2	0.0%
30402-15-4	Dioxins	Total PeCDF	ug/kg	0.0047	0.0011	1/5	20%	0.000435	0.00034	0/2	0.0%
41903-57-5	Dioxins	Total TCDD	ug/kg	0.012	0.0027	2/5	40%	0.00030	0.00024	0/2	0.0%
55722-27-5	Dioxins	Total TCDF	ug/kg	0.018	0.0037	1/5	20%	0.000255	0.00021	0/2	0.0%
7429-90-5	Metals	Aluminum	mg/kg	9400	2798	38/38	100%	5900	1689	8/8	100%
7440-38-2	Metals	Arsenic	mg/kg	7.5	2.9	38/38	100%	5.6	2.2	8/8	100%
7440-39-3	Metals	Barium	mg/kg	300	85	38/38	100%	140	42	8/8	100%
7440-41-7	Metals	Beryllium	mg/kg	0.64	0.23	28/38	74%	0.48	0.26	1/8	13%
7440-43-9	Metals	Cadmium	mg/kg	1.4	0.48	18/38	47%	1.2	0.38	1/8	13%
7440-70-2	Metals	Calcium	mg/kg	18000	5918	38/38	100%	8200	2790	8/8	100%
7440-47-3	Metals	Chromium	mg/kg	19	6.7	38/38	100%	11	4.7	8/8	100%
7440-48-4	Metals	Cobalt	mg/kg	10	4.0	38/38	100%	6.0	3.1	8/8	100%
7440-50-8	Metals	Copper	mg/kg	20	5.9	32/38	84%	12	2.9	8/8	100%
7439-89-6	Metals	Iron	mg/kg	20000	8016	38/38	100%	12000	5088	8/8	100%
7439-92-1	Metals	Lead	mg/kg	47	16	38/38	100%	12	4.4	8/8	100%
7439-95-4	Metals	Magnesium	mg/kg	6400	2166	38/38	100%	3400	1246	8/8	100%
7439-96-5	Metals	Manganese	mg/kg	1000	267	38/38	100%	500	185	8/8	100%
7440-02-0	Metals	Nickel	mg/kg	21	8.7	38/38	100%	15	7.2	8/8	100%
7440-09-7	Metals	Potassium	mg/kg	1300	435	38/38	100%	820	256	8/8	100%
7440-23-5	Metals	Sodium	mg/kg	290	78	21/38	55%	78	40	8/8	100%
7440-62-2	Metals	Vanadium	mg/kg	25	9.6	38/38	100%	19	6.4	8/8	100%
7440-66-6	Metals	Zinc	mg/kg	310	89	37/38	97%	89	21	7/8	88%

Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table 3-6. Concentrations and frequency of detection of 2005 sediment COPECs retained after initial screening.

CAS	Chemical Class	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
106-46-7	VOCs	1,4-Dichlorobenzene	ug/kg	650	225	4/10	40%	250	194	0/8	0.0%
71-43-2	VOCs	Benzene	ug/kg	5.5	3.2	1/10	10%	1.7	1.4	0/8	0.0%
108-90-7	VOCs	Chlorobenzene	ug/kg	450	61	7/10	70%	1.7	1.4	0/8	0.0%
100-41-4	VOCs	Ethylbenzene	ug/kg	3.8	2.6	3/10	30%	1.7	1.4	0/8	0.0%
108-88-3	VOCs	Toluene	ug/kg	8.5	3.6	1/10	10%	1.7	1.4	0/8	0.0%
1330-20-7	VOCs	Xylenes, Total	ug/kg	15	6.8	1/10	10%	5.5	3.5	1/8	13%
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	360	218	1/10	10%	250	194	0/8	0.0%
129-00-0	SVOCs	Pyrene	ug/kg	355	184	2/10	20%	220	171	1/8	13%
72-54-8	Pesticides	4,4'-DDD	ug/kg	37	9.2	2/10	20%	2.5	1.9	0/8	0.0%
94-75-7	Herbicides	2,4-D	ug/kg	120	32	4/10	40%	5.2	5.2	1/1	100%
120-36-5	Herbicides	Dichlorprop	ug/kg	60	44	4/10	40%	23	18	5/5	100%
7429-90-5	Metals	Aluminum	mg/kg	12000	3910	10/10	100%	5900	1689	8/8	100%
7440-38-2	Metals	Arsenic	mg/kg	6.7	3.0	10/10	100%	5.6	2.2	8/8	100%
7440-39-3	Metals	Barium	mg/kg	180	71	10/10	100%	140	42	8/8	100%
7440-41-7	Metals	Beryllium	mg/kg	0.65	0.23	10/10	100%	0.48	0.26	1/8	13%
7440-43-9	Metals	Cadmium	mg/kg	1.7	0.64	6/10	60%	1.2	0.38	1/8	13%
7440-70-2	Metals	Calcium	mg/kg	11000	4560	10/10	100%	8200	2790	8/8	100%
7440-47-3	Metals	Chromium	mg/kg	17	6.7	10/10	100%	11	4.7	8/8	100%
7440-48-4	Metals	Cobalt	mg/kg	7.7	4.1	10/10	100%	6.0	3.1	8/8	100%
7440-50-8	Metals	Copper	mg/kg	18	7.1	10/10	100%	12	2.9	8/8	100%
7439-89-6	Metals	Iron	mg/kg	17000	7270	10/10	100%	12000	5088	8/8	100%
7439-92-1	Metals	Lead	mg/kg	29	11	10/10	100%	12	4.4	8/8	100%
7439-95-4	Metals	Magnesium	mg/kg	4200	1794	10/10	100%	3400	1246	8/8	100%
7439-96-5	Metals	Manganese	mg/kg	770	291	10/10	100%	500	185	8/8	100%
7440-02-0	Metals	Nickel	mg/kg	19	9.5	10/10	100%	15	7.2	8/8	100%
7440-09-7	Metals	Potassium	mg/kg	1800	593	10/10	100%	820	256	8/8	100%
7440-62-2	Metals	Vanadium	mg/kg	29	11	10/10	100%	19	6.4	8/8	100%
7440-66-6	Metals	Zinc	mg/kg	540	195	10/10	100%	89	21	7/8	88%

Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table 3-7. Concentrations and frequency of detection of 2007 sediment COPECs retained after initial screening.

CAS	Chemical Class	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
106-46-7	VOCs	1,4-Dichlorobenzene	ug/kg	1200	528	1/3	33%	250	194	0/8	0.0%
78-93-3	VOCs	2-Butanone (MEK)	ug/kg	46	28	1/3	33%	8.5	6.7	1/8	13%
67-64-1	VOCs	Acetone	ug/kg	300	111	3/3	100%	98	32	7/8	88%
71-43-2	VOCs	Benzene	ug/kg	27	10	1/3	33%	1.7	1.4	0/8	0.0%
75-15-0	VOCs	Carbon Disulfide	ug/kg	20	7.8	2/3	67%	1.7	1.4	0/8	0.0%
108-90-7	VOCs	Chlorobenzene	ug/kg	19000	6334	3/3	100%	1.7	1.4	0/8	0.0%
100-41-4	VOCs	Ethylbenzene	ug/kg	8.4	4.1	1/3	33%	1.7	1.4	0/8	0.0%
108-88-3	VOCs	Toluene	ug/kg	200	68	1/3	33%	1.7	1.4	0/8	0.0%
1330-20-7	VOCs	Xylenes, Total	ug/kg	18	8.6	1/3	33%	5.5	3.5	1/8	13%
83-32-9	SVOCs	Acenaphthene	ug/kg	290	171	1/3	33%	250	194	0/8	0.0%
132-64-9	SVOCs	Dibenzofuran	ug/kg	290	170	1/3	33%	250	194	0/8	0.0%
84-66-2	SVOCs	Diethyl Phthalate	ug/kg	290	183	1/3	33%	250	194	0/8	0.0%
206-44-0	SVOCs	Fluoranthene	ug/kg	260	193	2/3	67%	220	145	2/8	25%
86-73-7	SVOCs	Fluorene	ug/kg	290	176	1/3	33%	250	194	0/8	0.0%
106-47-8	SVOCs	P-Chloroaniline	ug/kg	1900	887	1/3	33%	500	389	0/8	0.0%
72-54-8	Pesticides	4,4'-DDD	ug/kg	8.8	4.2	1/3	33%	2.5	1.9	0/8	0.0%
120-36-5	Herbicides	Dichlorprop	ug/kg	56	22	1/3	33%	23	18	5/5	100%
7429-90-5	Metals	Aluminum	mg/kg	8700	3563	3/3	100%	5900	1689	8/8	100%
7440-39-3	Metals	Barium	mg/kg	160	74	3/3	100%	140	42	8/8	100%
7440-41-7	Metals	Beryllium	mg/kg	0.50	0.22	3/3	100%	0.48	0.26	1/8	13%
7440-43-9	Metals	Cadmium	mg/kg	2.0	0.84	1/3	33%	1.2	0.38	1/8	13%
7440-70-2	Metals	Calcium	mg/kg	14000	5633	3/3	100%	8200	2790	8/8	100%
7440-47-3	Metals	Chromium	mg/kg	17	7.8	3/3	100%	11	4.7	8/8	100%
7440-48-4	Metals	Cobalt	mg/kg	6.3	3.9	3/3	100%	6.0	3.1	8/8	100%
7440-50-8	Metals	Copper	mg/kg	22	8.2	3/3	100%	12	2.9	8/8	100%
7439-89-6	Metals	Iron	mg/kg	15000	7733	3/3	100%	12000	5088	8/8	100%
7439-92-1	Metals	Lead	mg/kg	27	12	3/3	100%	12	4.4	8/8	100%
7439-95-4	Metals	Magnesium	mg/kg	4100	1877	3/3	100%	3400	1246	8/8	100%
7440-02-0	Metals	Nickel	mg/kg	16	9.6	3/3	100%	15	7.2	8/8	100%
7440-09-7	Metals	Potassium	mg/kg	1500	623	3/3	100%	820	256	8/8	100%
7440-62-2	Metals	Vanadium	mg/kg	26	12	3/3	100%	19	6.4	8/8	100%
7440-66-6	Metals	Zinc	mg/kg	370	155	3/3	100%	89	21	7/8	88%

Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table 3-8. Concentrations and frequency of detection of 2002 surface water COPECs retained after initial screening.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
95-50-1	VOCs	T	1,2-Dichlorobenzene	ug/l	40	5.8	2/39	5.1%	5.0	5.0	0/8	0.0%
107-06-2	VOCs	T	1,2-Dichloroethane	ug/l	0.70	0.45	11/39	28%	0.50	0.50	0/8	0.0%
71-43-2	VOCs	T	Benzene	ug/l	4.5	0.55	14/39	36%	0.50	0.50	0/8	0.0%
75-15-0	VOCs	T	Carbon Disulfide	ug/l	0.69	0.48	5/39	13%	0.50	0.50	0/8	0.0%
108-90-7	VOCs	T	Chlorobenzene	ug/l	56	3.2	28/39	72%	0.50	0.50	0/8	0.0%
74-87-3	VOCs	T	Chloromethane	ug/l	0.96	0.50	5/39	13%	0.50	0.47	1/8	13%
108-88-3	VOCs	T	Toluene	ug/l	4.5	0.61	10/39	26%	0.50	0.50	0/8	0.0%
1330-20-7	VOCs	T	Xylenes, Total	ug/l	3.0	1.0	3/39	7.7%	1.0	1.0	0/8	0.0%
120-83-2	SVOCs	T	2,4-Dichlorophenol	ug/l	69	5.9	11/39	28%	5.0	5.0	0/8	0.0%
95-57-8	SVOCs	T	2-Chlorophenol	ug/l	31	5.3	6/39	15%	5.0	5.0	0/8	0.0%
106-44-5	SVOCs	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	27	5.5	2/39	5.1%	5.0	5.0	0/8	0.0%
106-47-8	SVOCs	T	P-Chloroaniline	ug/l	160	12	17/39	44%	10	10	0/8	0.0%
108-95-2	SVOCs	T	Phenol	ug/l	14	5.4	10/39	26%	5.0	5.0	0/8	0.0%
94-75-7	Herbicides	T	2,4-D	ug/l	29	2.0	25/39	64%	0.25	0.25	0/8	0.0%
7429-90-5	Metals	T	Aluminum	mg/l	1.1	0.76	38/39	97%	0.88	0.71	8/8	100%
7440-38-2	Metals	T	Arsenic	mg/l	0.0061	0.0049	7/39	18%	0.0050	0.0050	0/8	0.0%
7440-39-3	Metals	D	Barium	mg/l	0.054	0.052	39/39	100%	0.051	0.050	8/8	100%
7440-39-3	Metals	T	Barium	mg/l	0.065	0.061	39/39	100%	0.061	0.059	8/8	100%
7440-70-2	Metals	D	Calcium	mg/l	53	51	39/39	100%	50	50	8/8	100%
7440-70-2	Metals	T	Calcium	mg/l	54	51	39/39	100%	53	51	8/8	100%
7440-48-4	Metals	T	Cobalt	mg/l	0.010	0.0042	9/39	23%	0.0050	0.0045	1/8	13%
7440-50-8	Metals	T	Copper	mg/l	0.039	0.010	2/39	5.1%	0.010	0.010	0/8	0.0%
7439-89-6	Metals	D	Iron	mg/l	0.087	0.039	28/39	72%	0.032	0.028	7/8	88%
7439-89-6	Metals	T	Iron	mg/l	1.4	1.1	39/39	100%	1.1	0.97	8/8	100%
7439-92-1	Metals	T	Lead	mg/l	0.0049	0.0026	5/39	13%	0.0025	0.0025	0/8	0.0%
7439-95-4	Metals	D	Magnesium	mg/l	22	20	39/39	100%	20	20	8/8	100%
7439-95-4	Metals	T	Magnesium	mg/l	22	20	39/39	100%	21	21	8/8	100%
7439-96-5	Metals	T	Manganese	mg/l	0.14	0.086	38/39	97%	0.084	0.081	8/8	100%
7439-97-6	Metals	D	Mercury	mg/l	0.00012	0.00010	3/39	7.7%	0.00010	0.00010	0/8	0.0%
7439-97-6	Metals	T	Mercury	mg/l	0.00020	0.00010	3/39	7.7%	0.00010	0.00010	0/8	0.0%
7440-09-7	Metals	D	Potassium	mg/l	3.6	3.4	39/39	100%	3.3	3.2	8/8	100%
7440-09-7	Metals	T	Potassium	mg/l	3.7	3.5	39/39	100%	3.5	3.4	8/8	100%
7440-23-5	Metals	D	Sodium	mg/l	24	20	39/39	100%	20	18	8/8	100%
7440-23-5	Metals	T	Sodium	mg/l	24	20	39/39	100%	20	18	8/8	100%
7440-62-2	Metals	D	Vanadium	mg/l	0.010	0.0050	3/39	7.7%	0.0050	0.0028	5/8	63%
7440-66-6	Metals	D	Zinc	mg/l	0.036	0.011	5/39	13%	0.010	0.010	0/8	0.0%
7440-66-6	Metals	T	Zinc	mg/l	0.041	0.0099	15/39	38%	0.010	0.0093	1/8	13%

Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table 3-9. Concentrations and frequency of detection of 2005 surface water COPECs retained after initial screening.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
108-90-7	VOCs	T	Chlorobenzene	ug/l	4.3	0.88	3/10	30%	0.50	0.50	0/8	0.0%
94-75-7	Herbicides	T	2,4-D	ug/l	1.2	0.41	4/10	40%	0.25	0.25	0/8	0.0%
7429-90-5	Metals	T	Aluminum	mg/l	3.8	2.6	10/10	100%	0.88	0.71	8/8	100%
7440-38-2	Metals	T	Arsenic	mg/l	0.0066	0.0054	5/10	50%	0.0050	0.0050	0/8	0.0%
7440-39-3	Metals	D	Barium	mg/l	0.076	0.072	10/10	100%	0.051	0.050	8/8	100%
7440-39-3	Metals	T	Barium	mg/l	0.12	0.10	10/10	100%	0.061	0.059	8/8	100%
7439-89-6	Metals	T	Iron	mg/l	3.5	2.5	10/10	100%	1.1	0.97	8/8	100%
7439-92-1	Metals	D	Lead	mg/l	0.0027	0.0025	3/10	30%	0.0025	0.0025	0/8	0.0%
7439-92-1	Metals	T	Lead	mg/l	0.0047	0.0035	8/10	80%	0.0025	0.0025	0/8	0.0%
7439-95-4	Metals	D	Magnesium	mg/l	22	21	10/10	100%	20	20	8/8	100%
7439-95-4	Metals	T	Magnesium	mg/l	22	21	10/10	100%	21	21	8/8	100%
7439-96-5	Metals	T	Manganese	mg/l	0.25	0.20	10/10	100%	0.084	0.081	8/8	100%
7440-09-7	Metals	D	Potassium	mg/l	4.9	4.6	10/10	100%	3.3	3.2	8/8	100%
7440-09-7	Metals	T	Potassium	mg/l	5.5	5.2	10/10	100%	3.5	3.4	8/8	100%
7782-49-2	Metals	D	Selenium	mg/l	0.0075	0.0045	1/10	10%	0.0050	0.0050	0/8	0.0%
7440-23-5	Metals	D	Sodium	mg/l	34	31	10/10	100%	20	18	8/8	100%
7440-23-5	Metals	T	Sodium	mg/l	35	31	10/10	100%	20	18	8/8	100%
7440-28-0	Metals	T	Thallium	mg/l	0.013	0.012	1/10	10%	0.0052	0.0050	1/8	13%
7440-62-2	Metals	T	Vanadium	mg/l	0.011	0.0088	10/10	100%	0.0050	0.0048	1/8	13%
7440-66-6	Metals	T	Zinc	mg/l	0.065	0.026	10/10	100%	0.010	0.0093	1/8	13%

Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table 3-10. Concentrations and frequency of detection of 2007 surface water COPECs retained after initial screening.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
7440-39-3	Metals	D	Barium	mg/l	0.066	0.065	5/5	100%	0.051	0.050	8/8	100%
7440-70-2	Metals	D	Calcium	mg/l	59	58	5/5	100%	50	50	8/8	100%
7439-89-6	Metals	D	Iron	mg/l	0.092	0.045	5/5	100%	0.032	0.028	7/8	88%
7439-95-4	Metals	D	Magnesium	mg/l	21	21	5/5	100%	20	20	8/8	100%
7440-09-7	Metals	D	Potassium	mg/l	4.6	4.5	5/5	100%	3.3	3.2	8/8	100%
7440-23-5	Metals	D	Sodium	mg/l	34	33	5/5	100%	20	18	8/8	100%

Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table 3-11. Concentrations and frequency of detection of all target analytes in Sediments collected from aquatic sampling sites in Mississippi River in 2002.

CAS	Chemical Class	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
71-55-6	VOCs	1,1,1-Trichloroethane	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
79-00-5	VOCs	1,1,2-Trichloroethane	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
75-34-3	VOCs	1,1-Dichloroethane	ug/kg	8.0	1.9	1/38	2.6%	ND	ND	0/8	0.0%
75-35-4	VOCs	1,1-Dichloroethylene	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
120-82-1	VOCs	1,2,4-Trichlorobenzene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
95-50-1	VOCs	1,2-Dichlorobenzene	ug/kg	ND	217	3/36	8.3%	ND	ND	0/8	0.0%
107-06-2	VOCs	1,2-Dichloroethane	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
540-59-0	VOCs	1,2-Dichloroethene (total)	ug/kg	ND	2.8	1/38	2.6%	ND	ND	0/8	0.0%
78-87-5	VOCs	1,2-Dichloropropane	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
541-73-1	VOCs	1,3-Dichlorobenzene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
106-46-7	VOCs	1,4-Dichlorobenzene	ug/kg	740	241	1/36	2.8%	ND	ND	0/8	0.0%
108-60-1	VOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
78-93-3	VOCs	2-Butanone (MEK)	ug/kg	ND	7.6	5/38	13%	ND	6.7	1/8	13%
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
67-64-1	VOCs	Acetone	ug/kg	290	25	32/38	84%	98	32	7/8	88%
71-43-2	VOCs	Benzene	ug/kg	49	3.9	4/38	11%	ND	ND	0/8	0.0%
75-27-4	VOCs	Bromodichloromethane	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
75-25-2	VOCs	Bromoform	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
74-83-9	VOCs	Bromomethane	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
75-15-0	VOCs	Carbon Disulfide	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
56-23-5	VOCs	Carbon Tetrachloride	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
108-90-7	VOCs	Chlorobenzene	ug/kg	11000	457	8/38	21%	ND	ND	0/8	0.0%
124-48-1	VOCs	Chlorodibromomethane	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
75-00-3	VOCs	Chloroethane	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
67-66-3	VOCs	Chloroform	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
74-87-3	VOCs	Chloromethane	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
75-09-2	VOCs	Dichloromethane	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
100-41-4	VOCs	Ethylbenzene	ug/kg	16	2.5	27/38	71%	ND	ND	0/8	0.0%
591-78-6	VOCs	Methyl N-Butyl Ketone	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
100-42-5	VOCs	Styrene (Monomer)	ug/kg	37	2.7	4/38	11%	ND	ND	0/8	0.0%
127-18-4	VOCs	Tetrachloroethene	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
108-88-3	VOCs	Toluene	ug/kg	14	2.6	12/38	32%	ND	ND	0/8	0.0%
79-01-6	VOCs	Trichloroethylene	ug/kg	ND	1.7	1/38	2.6%	ND	ND	0/8	0.0%
75-01-4	VOCs	Vinyl chloride	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
1330-20-7	VOCs	Xylenes, Total	ug/kg	81	12	34/38	89%	ND	3.5	1/8	13%
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
120-83-2	SVOCs	2,4-Dichlorophenol	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
105-67-9	SVOCs	2,4-Dimethylphenol	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
51-28-5	SVOCs	2,4-Dinitrophenol	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
91-58-7	SVOCs	2-Chloronaphthalene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
95-57-8	SVOCs	2-Chlorophenol	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%

Table 3-11. Concentrations and frequency of detection of all target analytes in Sediments collected from aquatic sampling sites in Mississippi River in 2002.

CAS	Chemical Class	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
91-57-6	SVOCs	2-Methylnaphthalene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
88-74-4	SVOCs	2-Nitroaniline	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
88-75-5	SVOCs	2-Nitrophenol	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
99-09-2	SVOCs	3-Nitroaniline	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
101-55-3	SVOCs	4-Bromophenyl Phenyl Ether	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
7005-72-3	SVOCs	4-Chlorophenyl Phenyl Ether	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
100-02-7	SVOCs	4-Nitrophenol	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
83-32-9	SVOCs	Acenaphthene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
208-96-8	SVOCs	Acenaphthylene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
120-12-7	SVOCs	Anthracene	ug/kg	ND	223	1/36	2.6%	ND	ND	0/8	0.0%
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg	ND	213	3/36	8.3%	ND	ND	0/8	0.0%
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg	ND	199	6/36	17%	ND	ND	0/8	0.0%
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg	ND	214	3/36	8.3%	ND	ND	0/8	0.0%
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg	ND	197	6/36	17%	ND	ND	0/8	0.0%
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg	ND	197	6/36	17%	ND	ND	0/8	0.0%
85-68-7	SVOCs	Benzyl Butyl Phthalate	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	ND	197	6/36	17%	ND	ND	0/8	0.0%
86-74-8	SVOCs	Carbazole	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
218-01-9	SVOCs	Chrysene	ug/kg	ND	179	8/36	22%	ND	166	1/8	13%
53-70-3	SVOCs	Dibenzo(a,h)anthracene	ug/kg	ND	226	1/36	2.8%	ND	ND	0/8	0.0%
132-64-9	SVOCs	Dibenzofuran	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
84-66-2	SVOCs	Diethyl Phthalate	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
131-11-3	SVOCs	Dimethyl Phthalate	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
84-74-2	SVOCs	Di-n-butylphthalate	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
117-84-0	SVOCs	Di-n-octylphthalate	ug/kg	ND	226	1/36	2.8%	ND	ND	0/8	0.0%
206-44-0	SVOCs	Fluoranthene	ug/kg	ND	199	5/36	14%	ND	145	2/8	25%
86-73-7	SVOCs	Fluorene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
118-74-1	SVOCs	Hexachlorobenzene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
87-68-3	SVOCs	Hexachlorobutadiene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
67-72-1	SVOCs	Hexachloroethane	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg	ND	221	2/36	5.6%	ND	ND	0/8	0.0%
78-59-1	SVOCs	Isophorone	ug/kg	390	236	1/36	2.8%	ND	ND	0/8	0.0%
91-20-3	SVOCs	Naphthalene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
98-95-3	SVOCs	Nitrobenzene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
106-47-8	SVOCs	P-Chloroaniline	ug/kg	3000	558	2/36	5.6%	ND	ND	0/8	0.0%
87-86-5	SVOCs	Pentachlorophenol	ug/kg	ND	10	6/35	17%				
85-01-8	SVOCs	Phenanthrene	ug/kg	ND	210	3/36	8.3%	ND	167	1/8	13%

Table 3-11. Concentrations and frequency of detection of all target analytes in Sediments collected from aquatic sampling sites in Mississippi River in 2002.

CAS	Chemical Class	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
108-95-2	SVOCs	Phenol	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
100-01-6	SVOCs	P-Nitroaniline	ug/kg	ND	ND	0/37	0.0%	ND	ND	0/8	0.0%
129-00-0	SVOCs	Pyrene	ug/kg	ND	224	1/36	2.8%	ND	171	1/8	13%
10061-02-6	SVOCs	trans-1,3-Dichloropropene	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
72-54-8	Pesticides	4,4'-DDD	ug/kg	ND	2.4	2/36	5.6%	ND	ND	0/8	0.0%
72-55-9	Pesticides	4,4'-DDE	ug/kg	4.9	2.0	10/36	28%	ND	ND	0/7	0.0%
50-29-3	Pesticides	4,4'-DDT	ug/kg	ND	2.6	3/34	8.8%	ND	ND	0/6	0.0%
309-00-2	Pesticides	Aldrin	ug/kg	ND	1.3	1/37	2.7%	ND	ND	0/8	0.0%
319-84-6	Pesticides	alpha-BHC	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
5103-71-9	Pesticides	alpha-Chlordane	ug/kg	ND	1.3	1/36	2.8%	ND	ND	0/8	0.0%
319-85-7	Pesticides	beta-BHC	ug/kg	ND	1.2	2/36	5.6%	ND	ND	0/8	0.0%
319-86-8	Pesticides	delta-BHC	ug/kg	ND	1.2	1/36	2.8%	ND	ND	0/8	0.0%
60-57-1	Pesticides	Dieldrin	ug/kg	ND	2.4	3/37	8.1%	ND	ND	0/8	0.0%
959-98-8	Pesticides	Endosulfan I	ug/kg	ND	1.2	1/36	2.8%	ND	ND	0/8	0.0%
33213-65-9	Pesticides	Endosulfan II	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
1031-07-8	Pesticides	Endosulfan Sulfate	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
72-20-8	Pesticides	Endrin	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
7421-93-4	Pesticides	Endrin Aldehyde	ug/kg	ND	2.4	10/36	28%	ND	ND	0/8	0.0%
53494-70-5	Pesticides	Endrin Ketone	ug/kg	ND	2.0	9/36	25%	ND	ND	0/8	0.0%
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/kg	ND	1.2	1/36	2.8%	ND	ND	0/8	0.0%
5103-74-2	Pesticides	gamma-Chlordane	ug/kg	3.0	1.2	7/36	19%	ND	ND	0/8	0.0%
76-44-8	Pesticides	Heptachlor	ug/kg	ND	1.2	5/36	14%	ND	ND	0/8	0.0%
1024-57-3	Pesticides	Heptachlor Epoxide	ug/kg	11	1.5	3/38	7.9%	ND	ND	0/8	0.0%
72-43-5	Pesticides	Methoxychlor	ug/kg	ND	13	3/36	8.3%	ND	ND	0/8	0.0%
8001-35-2	Pesticides	Toxaphene	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
93-76-5	Herbicides	2,4,5-T	ug/kg	ND	ND	0/35	0.0%				
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/kg	ND	ND	0/35	0.0%				
94-75-7	Herbicides	2,4-D	ug/kg	20	7.1	5/37	14%	5.2	5.2	1/1	100%
94-82-6	Herbicides	2,4-DB	ug/kg	ND	ND	0/35	0.0%				
75-99-0	Herbicides	Dalapon	ug/kg	ND	1281	2/25	8.0%				
1918-00-9	Herbicides	Dicamba	ug/kg	ND	ND	0/35	0.0%				
120-36-5	Herbicides	Dichlorprop	ug/kg	ND	66	2/35	5.7%	23	18	5/5	100%
88-85-7	Herbicides	Dinoseb	ug/kg	ND	ND	0/36	0.0%	ND	ND	0/8	0.0%
94-74-6	Herbicides	MCPA (2-Methyl-4- Chlorophenoxyacetic Acid)	ug/kg	ND	1349	1/35	2.9%				
93-65-2	Herbicides	MCPP	ug/kg	2500	1391	2/35	5.7%	460	415	2/2	100%
2051-24-3	PCBs	Decachlorobiphenyl	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
C-DICHLOROBI	PCBs	Dichlorobiphenyl	ug/kg	14	2.5	3/38	7.9%	ND	ND	0/8	0.0%
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/kg	29	3.0	4/38	11%	ND	ND	0/8	0.0%
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/kg	ND	12	2/38	5.3%	ND	ND	0/8	0.0%
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
C-PENTBIPHEN	PCBs	Pentachlorobiphenyl	ug/kg	ND	4.6	1/38	2.6%	ND	ND	0/8	0.0%
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/kg	10	2.4	4/38	11%	ND	ND	0/8	0.0%
35822-46-9	Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.055	0.019	3/5	60%	ND	ND	0/2	0.0%
67562-39-4	Dioxins	1,2,3,4,6,7,8-HpCDF	ug/kg	0.0077	0.0026	2/5	40%	ND	ND	0/2	0.0%

Table 3-11. Concentrations and frequency of detection of all target analytes in Sediments collected from aquatic sampling sites in Mississippi River in 2002.

CAS	Chemical Class	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
55673-89-7	Dioxins	1,2,3,4,7,8,9-HpCDF	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
39227-28-6	Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
70648-26-9	Dioxins	1,2,3,4,7,8-HxCDF	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
57653-85-7	Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
57117-44-9	Dioxins	1,2,3,6,7,8-HxCDF	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
19408-74-3	Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
72918-21-9	Dioxins	1,2,3,7,8,9-HxCDF	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
57117-41-6	Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
40321-76-4	Dioxins	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
60851-34-5	Dioxins	2,3,4,6,7,8-HxCDF	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
57117-31-4	Dioxins	2,3,4,7,8-PeCDF	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
1746-01-6	Dioxins	2,3,7,8-TCDD	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
51207-31-9	Dioxins	2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.0011	0.00034	1/5	20%	ND	ND	0/2	0.0%
3268-87-9	Dioxins	OCDD	ug/kg	1.8	0.50	5/5	100%	0.035	0.024	2/2	100%
39001-02-0	Dioxins	OCDF	ug/kg	0.036	0.015	3/5	60%	ND	ND	0/2	0.0%
37871-00-4	Dioxins	Total HpCDD	ug/kg	0.13	0.041	3/5	60%	0.0027	0.0016	1/2	50%
38998-75-3	Dioxins	Total HpCDF	ug/kg	0.029	0.011	3/5	60%	ND	ND	0/2	0.0%
34465-46-8	Dioxins	Total HxCDD	ug/kg	0.015	0.0034	1/5	20%	ND	ND	0/2	0.0%
55684-94-1	Dioxins	Total HxCDF	ug/kg	0.0046	0.0013	1/5	20%	ND	ND	0/2	0.0%
36088-22-9	Dioxins	Total PeCDD	ug/kg	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
30402-15-4	Dioxins	Total PeCDF	ug/kg	0.0047	0.0011	1/5	20%	ND	ND	0/2	0.0%
41903-57-5	Dioxins	Total TCDD	ug/kg	0.012	0.0027	2/5	40%	ND	ND	0/2	0.0%
55722-27-5	Dioxins	Total TCDF	ug/kg	0.018	0.0037	1/5	20%	ND	ND	0/2	0.0%
7429-90-5	Metals	Aluminum	mg/kg	9400	2798	38/38	100%	5900	1689	8/8	100%
7440-36-0	Metals	Antimony	mg/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
7440-38-2	Metals	Arsenic	mg/kg	7.5	2.9	38/38	100%	5.6	2.2	8/8	100%
7440-39-3	Metals	Barium	mg/kg	300	85	38/38	100%	140	42	8/8	100%
7440-41-7	Metals	Beryllium	mg/kg	0.64	0.23	28/38	74%	0.48	0.26	1/8	13%
7440-43-9	Metals	Cadmium	mg/kg	1.4	0.48	18/38	47%	1.2	0.38	1/8	13%
7440-70-2	Metals	Calcium	mg/kg	18000	5918	38/38	100%	8200	2790	8/8	100%
7440-47-3	Metals	Chromium	mg/kg	19	6.7	38/38	100%	11	4.7	8/8	100%
7440-48-4	Metals	Cobalt	mg/kg	10	4.0	38/38	100%	6.0	3.1	8/8	100%
7440-50-8	Metals	Copper	mg/kg	20	5.9	32/38	84%	12	2.9	8/8	100%
7439-89-6	Metals	Iron	mg/kg	20000	8016	38/38	100%	12000	5088	8/8	100%
7439-92-1	Metals	Lead	mg/kg	47	16	38/38	100%	12	4.4	8/8	100%
7439-95-4	Metals	Magnesium	mg/kg	6400	2166	38/38	100%	3400	1246	8/8	100%
7439-96-5	Metals	Manganese	mg/kg	1000	267	38/38	100%	500	185	8/8	100%
7439-97-6	Metals	Mercury	mg/kg	0.067	0.019	26/38	68%	0.13	0.030	4/8	50%
7440-02-0	Metals	Nickel	mg/kg	21	8.7	38/38	100%	15	7.2	8/8	100%
7440-09-7	Metals	Potassium	mg/kg	1300	435	38/38	100%	820	256	8/8	100%
7782-49-2	Metals	Selenium	mg/kg	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
7440-22-4	Metals	Silver	mg/kg	ND	0.63	1/38	2.6%	ND	ND	0/8	0.0%
7440-23-5	Metals	Sodium	mg/kg	290	78	21/38	55%	78	40	8/8	100%
7440-28-0	Metals	Thallium	mg/kg	ND	0.74	1/38	2.6%	ND	ND	0/8	0.0%
7440-62-2	Metals	Vanadium	mg/kg	25	9.6	38/38	100%	19	6.4	8/8	100%
7440-66-6	Metals	Zinc	mg/kg	310	89	37/38	97%	89	21	7/8	88%

Table 3-12. Concentrations and frequency of detection of all target analytes in Sediments collected from aquatic sampling sites in Mississippi River in 2005.

CAS	Chemical Class	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
71-55-6	VOCs	1,1,1-Trichloroethane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
79-00-5	VOCs	1,1,2-Trichloroethane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-34-3	VOCs	1,1-Dichloroethane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-35-4	VOCs	1,1-Dichloroethylene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
120-82-1	VOCs	1,2,4-Trichlorobenzene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
95-50-1	VOCs	1,2-Dichlorobenzene	ug/kg	240	173	4/10	40%	ND	ND	0/8	0.0%
107-06-2	VOCs	1,2-Dichloroethane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
540-59-0	VOCs	1,2-Dichloroethene (total)	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
78-87-5	VOCs	1,2-Dichloropropane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
541-73-1	VOCs	1,3-Dichlorobenzene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
106-46-7	VOCs	1,4-Dichlorobenzene	ug/kg	650	225	4/10	40%	ND	ND	0/8	0.0%
108-60-1	VOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg	ND	ND	0/7	0.0%	ND	ND	0/8	0.0%
78-93-3	VOCs	2-Butanone (MEK)	ug/kg	ND	ND	0/10	0.0%	ND	6.7	1/8	13%
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
67-64-1	VOCs	Acetone	ug/kg	ND	30	1/10	10%	98	32	7/8	88%
71-43-2	VOCs	Benzene	ug/kg	ND	3.2	1/10	10%	ND	ND	0/8	0.0%
75-27-4	VOCs	Bromodichloromethane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-25-2	VOCs	Bromoform	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
74-83-9	VOCs	Bromomethane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-15-0	VOCs	Carbon Disulfide	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
56-23-5	VOCs	Carbon Tetrachloride	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
108-90-7	VOCs	Chlorobenzene	ug/kg	450	61	7/10	70%	ND	ND	0/8	0.0%
124-48-1	VOCs	Chlorodibromomethane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-00-3	VOCs	Chloroethane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
67-66-3	VOCs	Chloroform	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
74-87-3	VOCs	Chloromethane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-09-2	VOCs	Dichloromethane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
100-41-4	VOCs	Ethylbenzene	ug/kg	ND	2.6	3/10	30%	ND	ND	0/8	0.0%
591-78-6	VOCs	Methyl N-Butyl Ketone	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
100-42-5	VOCs	Styrene (Monomer)	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
127-18-4	VOCs	Tetrachloroethene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
108-88-3	VOCs	Toluene	ug/kg	8.5	3.6	1/10	10%	ND	ND	0/8	0.0%
79-01-6	VOCs	Trichloroethylene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-01-4	VOCs	Vinyl chloride	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
1330-20-7	VOCs	Xylenes, Total	ug/kg	ND	6.8	1/10	10%	ND	3.5	1/8	13%
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
120-83-2	SVOCs	2,4-Dichlorophenol	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
105-67-9	SVOCs	2,4-Dimethylphenol	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
51-28-5	SVOCs	2,4-Dinitrophenol	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
91-58-7	SVOCs	2-Chloronaphthalene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
95-57-8	SVOCs	2-Chlorophenol	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%

Table 3-12. Concentrations and frequency of detection of all target analytes in Sediments collected from aquatic sampling sites in Mississippi River in 2005.

CAS	Chemical Class	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
91-57-6	SVOCs	2-Methylnaphthalene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
88-74-4	SVOCs	2-Nitroaniline	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
88-75-5	SVOCs	2-Nitrophenol	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
99-09-2	SVOCs	3-Nitroaniline	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
101-55-3	SVOCs	4-Bromophenyl Phenyl Ether	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7005-72-3	SVOCs	4-Chlorophenyl Phenyl Ether	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
100-02-7	SVOCs	4-Nitrophenol	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
83-32-9	SVOCs	Acenaphthene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
208-96-8	SVOCs	Acenaphthylene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
120-12-7	SVOCs	Anthracene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
85-68-7	SVOCs	Benzyl Butyl Phthalate	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	ND	218	1/10	10%	ND	ND	0/8	0.0%
86-74-8	SVOCs	Carbazole	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
218-01-9	SVOCs	Chrysene	ug/kg	ND	ND	0/10	0.0%	ND	166	1/8	13%
53-70-3	SVOCs	Dibenzo(a,h)anthracene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
132-64-9	SVOCs	Dibenzofuran	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
84-66-2	SVOCs	Diethyl Phthalate	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
131-11-3	SVOCs	Dimethyl Phthalate	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
84-74-2	SVOCs	Di-n-butylphthalate	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
117-84-0	SVOCs	Di-n-octylphthalate	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
206-44-0	SVOCs	Fluoranthene	ug/kg	ND	ND	0/10	0.0%	ND	145	2/8	25%
86-73-7	SVOCs	Fluorene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
118-74-1	SVOCs	Hexachlorobenzene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
87-68-3	SVOCs	Hexachlorobutadiene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
67-72-1	SVOCs	Hexachloroethane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
78-59-1	SVOCs	Isophorone	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
91-20-3	SVOCs	Naphthalene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
98-95-3	SVOCs	Nitrobenzene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
106-47-8	SVOCs	P-Chloroaniline	ug/kg	500	221	8/10	80%	ND	ND	0/8	0.0%
87-86-5	SVOCs	Pentachlorophenol	ug/kg	ND	ND	0/10	0.0%				
85-01-8	SVOCs	Phenanthrene	ug/kg	ND	ND	0/10	0.0%	ND	167	1/8	13%

Table 3-12. Concentrations and frequency of detection of all target analytes in Sediments collected from aquatic sampling sites in Mississippi River in 2005.

CAS	Chemical Class	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
108-95-2	SVOCs	Phenol	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
100-01-6	SVOCs	P-Nitroaniline	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
129-00-0	SVOCs	Pyrene	ug/kg	ND	184	2/10	20%	ND	171	1/8	13%
10061-02-6	SVOCs	trans-1,3-Dichloropropene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
72-54-8	Pesticides	4,4'-DDD	ug/kg	ND	9.2	2/10	20%	ND	ND	0/8	0.0%
72-55-9	Pesticides	4,4'-DDE	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/7	0.0%
50-29-3	Pesticides	4,4'-DDT	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/6	0.0%
309-00-2	Pesticides	Aldrin	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
319-84-6	Pesticides	alpha-BHC	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
5103-71-9	Pesticides	alpha-Chlordane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
319-85-7	Pesticides	beta-BHC	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
319-86-8	Pesticides	delta-BHC	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
60-57-1	Pesticides	Dieldrin	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
959-98-8	Pesticides	Endosulfan I	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
33213-65-9	Pesticides	Endosulfan II	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
1031-07-8	Pesticides	Endosulfan Sulfate	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
72-20-8	Pesticides	Endrin	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7421-93-4	Pesticides	Endrin Aldehyde	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
53494-70-5	Pesticides	Endrin Ketone	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
5103-74-2	Pesticides	gamma-Chlordane	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
76-44-8	Pesticides	Heptachlor	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
1024-57-3	Pesticides	Heptachlor Epoxide	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
72-43-5	Pesticides	Methoxychlor	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
8001-35-2	Pesticides	Toxaphene	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
93-76-5	Herbicides	2,4,5-T	ug/kg	ND	ND	0/10	0.0%				
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/kg	ND	ND	0/10	0.0%				
94-75-7	Herbicides	2,4-D	ug/kg	120	32	4/10	40%	5.2	5.2	1/1	100%
94-82-6	Herbicides	2,4-DB	ug/kg	ND	ND	0/10	0.0%				
75-99-0	Herbicides	Dalapon	ug/kg	ND	ND	0/10	0.0%				
1918-00-9	Herbicides	Dicamba	ug/kg	ND	ND	0/10	0.0%				
120-36-5	Herbicides	Dichlorprop	ug/kg	ND	44	4/10	40%	23	18	5/5	100%
88-85-7	Herbicides	Dinoseb	ug/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
94-74-6	Herbicides	MCPA (2-Methyl-4- Chlorophenoxyacetic Acid)	ug/kg	ND	ND	0/10	0.0%				
93-65-2	Herbicides	MCPP	ug/kg	ND	ND	0/10	0.0%	460	415	2/2	100%
7429-90-5	Metals	Aluminum	mg/kg	12000	3910	10/10	100%	5900	1689	8/8	100%
7440-36-0	Metals	Antimony	mg/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-38-2	Metals	Arsenic	mg/kg	6.7	3.0	10/10	100%	5.6	2.2	8/8	100%
7440-39-3	Metals	Barium	mg/kg	180	71	10/10	100%	140	42	8/8	100%
7440-41-7	Metals	Beryllium	mg/kg	0.65	0.23	10/10	100%	0.48	0.26	1/8	13%
7440-43-9	Metals	Cadmium	mg/kg	1.7	0.64	6/10	60%	1.2	0.38	1/8	13%
7440-70-2	Metals	Calcium	mg/kg	11000	4560	10/10	100%	8200	2790	8/8	100%
7440-47-3	Metals	Chromium	mg/kg	17	6.7	10/10	100%	11	4.7	8/8	100%
7440-48-4	Metals	Cobalt	mg/kg	7.7	4.1	10/10	100%	6.0	3.1	8/8	100%
7440-50-8	Metals	Copper	mg/kg	18	7.1	10/10	100%	12	2.9	8/8	100%
7439-89-6	Metals	Iron	mg/kg	17000	7270	10/10	100%	12000	5088	8/8	100%
7439-92-1	Metals	Lead	mg/kg	29	11	10/10	100%	12	4.4	8/8	100%

Table 3-12. Concentrations and frequency of detection of all target analytes in Sediments collected from aquatic sampling sites in Mississippi River in 2005.

CAS	Chemical Class	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
7439-95-4	Metals	Magnesium	mg/kg	4200	1794	10/10	100%	3400	1246	8/8	100%
7439-96-5	Metals	Manganese	mg/kg	770	291	10/10	100%	500	185	8/8	100%
7439-97-6	Metals	Mercury	mg/kg	0.046	0.021	8/10	80%	0.13	0.030	4/8	50%
7440-02-0	Metals	Nickel	mg/kg	19	9.5	10/10	100%	15	7.2	8/8	100%
7440-09-7	Metals	Potassium	mg/kg	1800	593	10/10	100%	820	256	8/8	100%
7782-49-2	Metals	Selenium	mg/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-22-4	Metals	Silver	mg/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-23-5	Metals	Sodium	mg/kg	ND	ND	0/10	0.0%	78	40	8/8	100%
7440-28-0	Metals	Thallium	mg/kg	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-62-2	Metals	Vanadium	mg/kg	29	11	10/10	100%	19	6.4	8/8	100%
7440-66-6	Metals	Zinc	mg/kg	540	195	10/10	100%	89	21	7/8	88%

Table 3-13. Concentrations and frequency of detection of all target analytes in Sediments collected from aquatic sampling sites in Mississippi River in 2007.

CAS	Chemical Class	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
71-55-6	VOCs	1,1,1-Trichloroethane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
79-00-5	VOCs	1,1,2-Trichloroethane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
75-34-3	VOCs	1,1-Dichloroethane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
75-35-4	VOCs	1,1-Dichloroethylene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
120-82-1	VOCs	1,2,4-Trichlorobenzene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
95-50-1	VOCs	1,2-Dichlorobenzene	ug/kg	ND	178	1/3	33%	ND	ND	0/8	0.0%
107-06-2	VOCs	1,2-Dichloroethane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
78-87-5	VOCs	1,2-Dichloropropane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
541-73-1	VOCs	1,3-Dichlorobenzene	ug/kg	ND	185	1/3	33%	ND	ND	0/8	0.0%
106-46-7	VOCs	1,4-Dichlorobenzene	ug/kg	1200	528	1/3	33%	ND	ND	0/8	0.0%
108-60-1	VOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
78-93-3	VOCs	2-Butanone (MEK)	ug/kg	46	28	1/3	33%	ND	6.7	1/8	13%
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
67-64-1	VOCs	Acetone	ug/kg	300	111	3/3	100%	98	32	7/8	88%
71-43-2	VOCs	Benzene	ug/kg	27	10	1/3	33%	ND	ND	0/8	0.0%
75-27-4	VOCs	Bromodichloromethane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
75-25-2	VOCs	Bromoform	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
74-83-9	VOCs	Bromomethane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
75-15-0	VOCs	Carbon Disulfide	ug/kg	20	7.8	2/3	67%	ND	ND	0/8	0.0%
56-23-5	VOCs	Carbon Tetrachloride	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
108-90-7	VOCs	Chlorobenzene	ug/kg	19000	6334	3/3	100%	ND	ND	0/8	0.0%
124-48-1	VOCs	Chlorodibromomethane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
75-00-3	VOCs	Chloroethane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
67-66-3	VOCs	Chloroform	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
74-87-3	VOCs	Chloromethane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
75-09-2	VOCs	Dichloromethane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
100-41-4	VOCs	Ethylbenzene	ug/kg	8.4	4.1	1/3	33%	ND	ND	0/8	0.0%
591-78-6	VOCs	Methyl N-Butyl Ketone	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
100-42-5	VOCs	Styrene (Monomer)	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
127-18-4	VOCs	Tetrachloroethene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
108-88-3	VOCs	Toluene	ug/kg	200	68	1/3	33%	ND	ND	0/8	0.0%
79-01-6	VOCs	Trichloroethylene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
75-01-4	VOCs	Vinyl chloride	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
1330-20-7	VOCs	Xylenes, Total	ug/kg	18	8.6	1/3	33%	ND	3.5	1/8	13%
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
120-83-2	SVOCs	2,4-Dichlorophenol	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
105-67-9	SVOCs	2,4-Dimethylphenol	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
51-28-5	SVOCs	2,4-Dinitrophenol	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
91-58-7	SVOCs	2-Chloronaphthalene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
95-57-8	SVOCs	2-Chlorophenol	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
91-57-6	SVOCs	2-Methylnaphthalene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%

Table 3-13. Concentrations and frequency of detection of all target analytes in Sediments collected from aquatic sampling sites in Mississippi River in 2007.

CAS	Chemical Class	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
88-74-4	SVOCs	2-Nitroaniline	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
88-75-5	SVOCs	2-Nitrophenol	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg	ND	162	1/3	33%	ND	ND	0/8	0.0%
99-09-2	SVOCs	3-Nitroaniline	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
101-55-3	SVOCs	4-Bromophenyl Phenyl Ether	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
7005-72-3	SVOCs	4-Chlorophenyl Phenyl Ether	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
100-02-7	SVOCs	4-Nitrophenol	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
83-32-9	SVOCs	Acenaphthene	ug/kg	ND	171	1/3	33%	ND	ND	0/8	0.0%
208-96-8	SVOCs	Acenaphthylene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
120-12-7	SVOCs	Anthracene	ug/kg	ND	97	2/3	67%	ND	ND	0/8	0.0%
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg	ND	168	1/3	33%	ND	ND	0/8	0.0%
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg	ND	156	1/3	33%	ND	ND	0/8	0.0%
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg	ND	156	1/3	33%	ND	ND	0/8	0.0%
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
85-68-7	SVOCs	Benzyl Butyl Phthalate	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
86-74-8	SVOCs	Carbazole	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
218-01-9	SVOCs	Chrysene	ug/kg	ND	121	2/3	67%	ND	166	1/8	13%
53-70-3	SVOCs	Dibenzo(a,h)anthracene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
132-64-9	SVOCs	Dibenzofuran	ug/kg	ND	170	1/3	33%	ND	ND	0/8	0.0%
84-66-2	SVOCs	Diethyl Phthalate	ug/kg	ND	183	1/3	33%	ND	ND	0/8	0.0%
131-11-3	SVOCs	Dimethyl Phthalate	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
84-74-2	SVOCs	Di-n-butylphthalate	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
117-84-0	SVOCs	Di-n-octylphthalate	ug/kg	ND	162	1/3	33%	ND	ND	0/8	0.0%
206-44-0	SVOCs	Fluoranthene	ug/kg	260	193	2/3	67%	ND	145	2/8	25%
86-73-7	SVOCs	Fluorene	ug/kg	ND	176	1/3	33%	ND	ND	0/8	0.0%
118-74-1	SVOCs	Hexachlorobenzene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
87-68-3	SVOCs	Hexachlorobutadiene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
67-72-1	SVOCs	Hexachloroethane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg	ND	152	1/3	33%	ND	ND	0/8	0.0%
78-59-1	SVOCs	Isophorone	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
91-20-3	SVOCs	Naphthalene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
98-95-3	SVOCs	Nitrobenzene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
106-47-8	SVOCs	P-Chloroaniline	ug/kg	1900	887	1/3	33%	ND	ND	0/8	0.0%
87-86-5	SVOCs	Pentachlorophenol	ug/kg	ND	ND	0/3	0.0%				
85-01-8	SVOCs	Phenanthrene	ug/kg	220	193	2/3	67%	ND	167	1/8	13%
108-95-2	SVOCs	Phenol	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%

Table 3-13. Concentrations and frequency of detection of all target analytes in Sediments collected from aquatic sampling sites in Mississippi River in 2007.

CAS	Chemical Class	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
100-01-6	SVOCs	P-Nitroaniline	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
129-00-0	SVOCs	Pyrene	ug/kg	220	167	2/3	67%	ND	171	1/8	13%
10061-02-6	SVOCs	trans-1,3-Dichloropropene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
72-54-8	Pesticides	4,4'-DDD	ug/kg	8.8	4.2	1/3	33%	ND	ND	0/8	0.0%
72-55-9	Pesticides	4,4'-DDE	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/7	0.0%
50-29-3	Pesticides	4,4'-DDT	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/6	0.0%
309-00-2	Pesticides	Aldrin	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
319-84-6	Pesticides	alpha-BHC	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
5103-71-9	Pesticides	alpha-Chlordane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
319-85-7	Pesticides	beta-BHC	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
319-86-8	Pesticides	delta-BHC	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
60-57-1	Pesticides	Dieldrin	ug/kg	ND	1.6	1/3	33%	ND	ND	0/8	0.0%
959-98-8	Pesticides	Endosulfan I	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
33213-65-9	Pesticides	Endosulfan II	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
1031-07-8	Pesticides	Endosulfan Sulfate	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
72-20-8	Pesticides	Endrin	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
7421-93-4	Pesticides	Endrin Aldehyde	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
53494-70-5	Pesticides	Endrin Ketone	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
5103-74-2	Pesticides	gamma-Chlordane	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
76-44-8	Pesticides	Heptachlor	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
1024-57-3	Pesticides	Heptachlor Epoxide	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
72-43-5	Pesticides	Methoxychlor	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
8001-35-2	Pesticides	Toxaphene	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
93-76-5	Herbicides	2,4,5-T	ug/kg	ND	ND	0/3	0.0%				
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/kg	ND	ND	0/3	0.0%				
94-75-7	Herbicides	2,4-D	ug/kg	ND	ND	0/3	0.0%	5.2	5.2	1/1	100%
94-82-6	Herbicides	2,4-DB	ug/kg	ND	ND	0/3	0.0%				
75-99-0	Herbicides	Dalapon	ug/kg	ND	ND	0/3	0.0%				
1918-00-9	Herbicides	Dicamba	ug/kg	ND	ND	0/3	0.0%				
120-36-5	Herbicides	Dichlorprop	ug/kg	56	22	1/3	33%	23	18	5/5	100%
88-85-7	Herbicides	Dinoseb	ug/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
94-74-6	Herbicides	MCPA (2-Methyl-4- Chlorophenoxyacetic Acid)	ug/kg	ND	ND	0/3	0.0%				
93-65-2	Herbicides	MCPP	ug/kg	ND	ND	0/3	0.0%	460	415	2/2	100%
7429-90-5	Metals	Aluminum	mg/kg	8700	3563	3/3	100%	5900	1689	8/8	100%
7440-36-0	Metals	Antimony	mg/kg	ND	0.96	1/3	33%	ND	ND	0/8	0.0%
7440-38-2	Metals	Arsenic	mg/kg	4.3	2.4	3/3	100%	5.6	2.2	8/8	100%
7440-39-3	Metals	Barium	mg/kg	160	74	3/3	100%	140	42	8/8	100%
7440-41-7	Metals	Beryllium	mg/kg	0.50	0.22	3/3	100%	0.48	0.26	1/8	13%
7440-43-9	Metals	Cadmium	mg/kg	2.0	0.84	1/3	33%	1.2	0.38	1/8	13%
7440-70-2	Metals	Calcium	mg/kg	14000	5633	3/3	100%	8200	2790	8/8	100%
7440-47-3	Metals	Chromium	mg/kg	17	7.8	3/3	100%	11	4.7	8/8	100%
7440-48-4	Metals	Cobalt	mg/kg	6.3	3.9	3/3	100%	6.0	3.1	8/8	100%
7440-50-8	Metals	Copper	mg/kg	22	8.2	3/3	100%	12	2.9	8/8	100%
7439-89-6	Metals	Iron	mg/kg	15000	7733	3/3	100%	12000	5088	8/8	100%
7439-92-1	Metals	Lead	mg/kg	27	12	3/3	100%	12	4.4	8/8	100%
7439-95-4	Metals	Magnesium	mg/kg	4100	1877	3/3	100%	3400	1246	8/8	100%

Table 3-13. Concentrations and frequency of detection of all target analytes in Sediments collected from aquatic sampling sites in Mississippi River in 2007.

CAS	Chemical Class	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
				Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
7439-96-5	Metals	Manganese	mg/kg	440	190	3/3	100%	500	185	8/8	100%
7439-97-6	Metals	Mercury	mg/kg	0.041	0.021	1/3	33%	0.13	0.030	4/8	50%
7440-02-0	Metals	Nickel	mg/kg	16	9.6	3/3	100%	15	7.2	8/8	100%
7440-09-7	Metals	Potassium	mg/kg	1500	623	3/3	100%	820	256	8/8	100%
7782-49-2	Metals	Selenium	mg/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
7440-22-4	Metals	Silver	mg/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
7440-23-5	Metals	Sodium	mg/kg	ND	ND	0/3	0.0%	78	40	8/8	100%
7440-28-0	Metals	Thallium	mg/kg	ND	ND	0/3	0.0%	ND	ND	0/8	0.0%
7440-62-2	Metals	Vanadium	mg/kg	26	12	3/3	100%	19	6.4	8/8	100%
7440-66-6	Metals	Zinc	mg/kg	370	155	3/3	100%	89	21	7/8	88%

Table 3-14. Concentrations and frequency of detection of all target analytes in Surface Water collected from aquatic sampling sites in Mississippi River in 2002.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
71-55-6	VOCs	T	1,1,1-Trichloroethane	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
79-34-5	VOCs	T	1,1,2,2-Tetrachloroethane	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
79-00-5	VOCs	T	1,1,2-Trichloroethane	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
75-34-3	VOCs	T	1,1-Dichloroethane	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
75-35-4	VOCs	T	1,1-Dichloroethylene	ug/l	ND	0.49	3/39	7.7%	ND	ND	0/8	0.0%
120-82-1	VOCs	T	1,2,4-Trichlorobenzene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
95-50-1	VOCs	T	1,2-Dichlorobenzene	ug/l	40	5.8	2/39	5.1%	ND	ND	0/8	0.0%
107-06-2	VOCs	T	1,2-Dichloroethane	ug/l	0.70	0.45	11/39	28%	ND	ND	0/8	0.0%
540-59-0	VOCs	T	1,2-Dichloroethene (total)	ug/l	ND	0.94	3/39	7.7%	ND	ND	0/8	0.0%
78-87-5	VOCs	T	1,2-Dichloropropane	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
541-73-1	VOCs	T	1,3-Dichlorobenzene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
106-46-7	VOCs	T	1,4-Dichlorobenzene	ug/l	ND	5.0	1/39	2.6%	ND	ND	0/8	0.0%
108-60-1	VOCs	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
78-93-3	VOCs	T	2-Butanone (MEK)	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
108-10-1	VOCs	T	4-Methyl-2-pentanone (MIBK)	ug/l	ND	5.0	1/39	2.6%	ND	ND	0/8	0.0%
67-64-1	VOCs	T	Acetone	ug/l	40	13	1/39	2.6%	ND	ND	0/8	0.0%
71-43-2	VOCs	T	Benzene	ug/l	4.5	0.55	14/39	36%	ND	ND	0/8	0.0%
75-27-4	VOCs	T	Bromodichloromethane	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
75-25-2	VOCs	T	Bromoform	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
74-83-9	VOCs	T	Bromomethane	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
75-15-0	VOCs	T	Carbon Disulfide	ug/l	0.69	0.48	5/39	13%	ND	ND	0/8	0.0%
56-23-5	VOCs	T	Carbon Tetrachloride	ug/l	ND	0.49	1/39	2.6%	ND	ND	0/8	0.0%
108-90-7	VOCs	T	Chlorobenzene	ug/l	56	3.2	28/39	72%	ND	ND	0/8	0.0%
124-48-1	VOCs	T	Chlorodibromomethane	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
75-00-3	VOCs	T	Chloroethane	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
67-66-3	VOCs	T	Chloroform	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
74-87-3	VOCs	T	Chloromethane	ug/l	0.96	0.50	5/39	13%	0.50	0.47	1/8	13%
10061-01-5	VOCs	T	cis-1,3-Dichloropropene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
75-09-2	VOCs	T	Dichloromethane	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
100-41-4	VOCs	T	Ethylbenzene	ug/l	1.3	0.52	1/39	2.6%	ND	ND	0/8	0.0%
591-78-6	VOCs	T	Methyl N-Butyl Ketone	ug/l	ND	4.9	1/39	2.6%	ND	ND	0/8	0.0%
100-42-5	VOCs	T	Styrene (Monomer)	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
127-18-4	VOCs	T	Tetrachloroethene	ug/l	ND	0.50	1/39	2.6%	ND	ND	0/8	0.0%
108-88-3	VOCs	T	Toluene	ug/l	4.5	0.61	10/39	26%	ND	ND	0/8	0.0%
79-01-6	VOCs	T	Trichloroethylene	ug/l	0.58	0.50	1/39	2.6%	ND	ND	0/8	0.0%
75-01-4	VOCs	T	Vinyl chloride	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
1330-20-7	VOCs	T	Xylenes, Total	ug/l	3.0	1.0	3/39	7.7%	ND	ND	0/8	0.0%
95-95-4	SVOCs	T	2,4,5-Trichlorophenol	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
88-06-2	SVOCs	T	2,4,6-Trichlorophenol	ug/l	17	5.3	1/39	2.6%	ND	ND	0/8	0.0%
120-83-2	SVOCs	T	2,4-Dichlorophenol	ug/l	69	5.9	11/39	28%	ND	ND	0/8	0.0%
105-67-9	SVOCs	T	2,4-Dimethylphenol	ug/l	8.3	5.1	1/39	2.6%	ND	ND	0/8	0.0%
51-28-5	SVOCs	T	2,4-Dinitrophenol	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
121-14-2	SVOCs	T	2,4-Dinitrotoluene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
606-20-2	SVOCs	T	2,6-Dinitrotoluene	ug/l	17	5.3	1/39	2.6%	ND	ND	0/8	0.0%
91-58-7	SVOCs	T	2-Chloronaphthalene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%

Table 3-14. Concentrations and frequency of detection of all target analytes in Surface Water collected from aquatic sampling sites in Mississippi River in 2002.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
95-57-8	SVOCs	T	2-Chlorophenol	ug/l	31	5.3	6/39	15%	ND	ND	0/8	0.0%
91-57-6	SVOCs	T	2-Methylnaphthalene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
95-48-7	SVOCs	T	2-Methylphenol (o-Cresol)	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
88-74-4	SVOCs	T	2-Nitroaniline	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
88-75-5	SVOCs	T	2-Nitrophenol	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
91-94-1	SVOCs	T	3,3'-Dichlorobenzidine	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
106-44-5	SVOCs	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	27	5.5	2/39	5.1%	ND	ND	0/8	0.0%
99-09-2	SVOCs	T	3-Nitroaniline	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
534-52-1	SVOCs	T	4,6-Dinitro-2-methylphenol	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
101-55-3	SVOCs	T	4-Bromophenyl Phenyl Ether	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
59-50-7	SVOCs	T	4-Chloro-3-methylphenol	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7005-72-3	SVOCs	T	4-Chlorophenyl Phenyl Ether	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
100-02-7	SVOCs	T	4-Nitrophenol	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
83-32-9	SVOCs	T	Acenaphthene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
208-96-8	SVOCs	T	Acenaphthylene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
120-12-7	SVOCs	T	Anthracene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
56-55-3	SVOCs	T	Benzo(a)anthracene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
50-32-8	SVOCs	T	Benzo(a)pyrene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
205-99-2	SVOCs	T	Benzo(b)fluoranthene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
191-24-2	SVOCs	T	Benzo(g,h,i)perylene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
207-08-9	SVOCs	T	Benzo(k)fluoranthene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
85-68-7	SVOCs	T	Benzyl Butyl Phthalate	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
111-91-1	SVOCs	T	bis(2-Chloroethoxy)methane	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
111-44-4	SVOCs	T	bis(2-Chloroethyl)ether	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
117-81-7	SVOCs	T	bis(2-Ethylhexyl)phthalate	ug/l	ND	4.9	1/39	2.6%	14	6.1	1/8	13%
86-74-8	SVOCs	T	Carbazole	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
218-01-9	SVOCs	T	Chrysene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
53-70-3	SVOCs	T	Dibenzo(a,h)anthracene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
132-64-9	SVOCs	T	Dibenzofuran	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
84-66-2	SVOCs	T	Diethyl Phthalate	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
131-11-3	SVOCs	T	Dimethyl Phthalate	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
84-74-2	SVOCs	T	Di-n-butylphthalate	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
117-84-0	SVOCs	T	Di-n-octylphthalate	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
206-44-0	SVOCs	T	Fluoranthene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
86-73-7	SVOCs	T	Fluorene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
118-74-1	SVOCs	T	Hexachlorobenzene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
87-68-3	SVOCs	T	Hexachlorobutadiene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
77-47-4	SVOCs	T	Hexachlorocyclopentadiene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
67-72-1	SVOCs	T	Hexachloroethane	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
193-39-5	SVOCs	T	Indeno(1,2,3-cd)pyrene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
78-59-1	SVOCs	T	Isophorone	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
91-20-3	SVOCs	T	Naphthalene	ug/l	21	5.4	1/39	2.6%	ND	ND	0/8	0.0%
98-95-3	SVOCs	T	Nitrobenzene	ug/l	ND	4.9	1/39	2.6%	ND	ND	0/8	0.0%
621-64-7	SVOCs	T	N-Nitroso-di-n-propylamine	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
86-30-6	SVOCs	T	N-Nitrosodiphenylamine	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
106-47-8	SVOCs	T	P-Chloroaniline	ug/l	160	12	17/39	44%	ND	ND	0/8	0.0%

Table 3-14. Concentrations and frequency of detection of all target analytes in Surface Water collected from aquatic sampling sites in Mississippi River in 2002.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
87-86-5	SVOCs	T	Pentachlorophenol	ug/l	1.9	0.54	1/39	2.6%	ND	0.48	1/8	13%
85-01-8	SVOCs	T	Phenanthrene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
108-95-2	SVOCs	T	Phenol	ug/l	14	5.4	10/39	26%	ND	ND	0/8	0.0%
100-01-6	SVOCs	T	P-Nitroaniline	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
129-00-0	SVOCs	T	Pyrene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
10061-02-6	SVOCs	T	trans-1,3-Dichloropropene	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
72-54-8	Pesticides	T	4,4'-DDD	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
72-55-9	Pesticides	T	4,4'-DDE	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
50-29-3	Pesticides	T	4,4'-DDT	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
309-00-2	Pesticides	T	Aldrin	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
319-84-6	Pesticides	T	alpha-BHC	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
5103-71-9	Pesticides	T	alpha-Chlordane	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
319-85-7	Pesticides	T	beta-BHC	ug/l	ND	0.024	2/38	5.3%	ND	ND	0/8	0.0%
319-86-8	Pesticides	T	delta-BHC	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
60-57-1	Pesticides	T	Dieldrin	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
959-98-8	Pesticides	T	Endosulfan I	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
33213-65-9	Pesticides	T	Endosulfan II	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
1031-07-8	Pesticides	T	Endosulfan Sulfate	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
72-20-8	Pesticides	T	Endrin	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
7421-93-4	Pesticides	T	Endrin Aldehyde	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
53494-70-5	Pesticides	T	Endrin Ketone	ug/l	ND	0.048	2/38	5.3%	ND	0.026	6/8	75%
58-89-9	Pesticides	T	gamma-BHC (Lindane)	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
5103-74-2	Pesticides	T	gamma-Chlordane	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
76-44-8	Pesticides	T	Heptachlor	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
1024-57-3	Pesticides	T	Heptachlor Epoxide	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
72-43-5	Pesticides	T	Methoxychlor	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
8001-35-2	Pesticides	T	Toxaphene	ug/l	ND	ND	0/38	0.0%	ND	ND	0/8	0.0%
93-76-5	Herbicides	T	2,4,5-T	ug/l	0.30	0.25	1/39	2.6%	ND	ND	0/8	0.0%
93-72-1	Herbicides	T	2,4,5-TP (Silvex)	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
94-75-7	Herbicides	T	2,4-D	ug/l	29	2.0	25/39	64%	ND	ND	0/8	0.0%
94-82-6	Herbicides	T	2,4-DB	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
75-99-0	Herbicides	T	Dalapon	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
1918-00-9	Herbicides	T	Dicamba	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
120-36-5	Herbicides	T	Dichlorprop	ug/l	ND	2.3	12/39	31%	ND	ND	0/8	0.0%
88-85-7	Herbicides	T	Dinoseb	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
94-74-6	Herbicides	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	ug/l	ND	59	1/39	2.6%	ND	ND	0/8	0.0%
93-65-2	Herbicides	T	MCPP	ug/l	ND	60	1/39	2.6%	ND	ND	0/8	0.0%
2051-24-3	PCBs	T	Decachlorobiphenyl	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
C-DICHLOROBI	PCBs	T	Dichlorobiphenyl	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
C-HEPTACHLOR	PCBs	T	Heptachlorobiphenyl	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
C-HEXACHLORO	PCBs	T	Hexachlorobiphenyl	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
C-MONOCHLORO	PCBs	T	Monochlorobiphenyl	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
C-NONACHLORO	PCBs	T	Nonachlorobiphenyl	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
C-OCTA-BIPHE	PCBs	T	Octachlorobiphenyl	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
C-PENTBIPHEN	PCBs	T	Pentachlorobiphenyl	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%

Table 3-14. Concentrations and frequency of detection of all target analytes in Surface Water collected from aquatic sampling sites in Mississippi River in 2002.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
C-TETRACHLOR	PCBs	T	Tetrachlorobiphenyl	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
C-TRICHLOROB	PCBs	T	Trichlorobiphenyl	ug/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
35822-46-9	Dioxins	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
67562-39-4	Dioxins	T	1,2,3,4,6,7,8-HpCDF	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
55673-89-7	Dioxins	T	1,2,3,4,7,8,9-HpCDF	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
39227-28-6	Dioxins	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
70648-26-9	Dioxins	T	1,2,3,4,7,8-HxCDF	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
57653-85-7	Dioxins	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
57117-44-9	Dioxins	T	1,2,3,6,7,8-HxCDF	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
19408-74-3	Dioxins	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
72918-21-9	Dioxins	T	1,2,3,7,8,9-HxCDF	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
57117-41-6	Dioxins	T	1,2,3,7,8-Pentachlorodibenzofuran	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
40321-76-4	Dioxins	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
60851-34-5	Dioxins	T	2,3,4,6,7,8-HxCDF	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
57117-31-4	Dioxins	T	2,3,4,7,8-PeCDF	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
1746-01-6	Dioxins	T	2,3,7,8-TCDD	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
51207-31-9	Dioxins	T	2,3,7,8-Tetrachlorodibenzofuran	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
3268-87-9	Dioxins	T	OCDD	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
39001-02-0	Dioxins	T	OCDF	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
37871-00-4	Dioxins	T	Total HpCDD	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
38998-75-3	Dioxins	T	Total HpCDF	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
34465-46-8	Dioxins	T	Total HxCDD	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
55684-94-1	Dioxins	T	Total HxCDF	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
36088-22-9	Dioxins	T	Total PeCDD	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
30402-15-4	Dioxins	T	Total PeCDF	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
41903-57-5	Dioxins	T	Total TCDD	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
55722-27-5	Dioxins	T	Total TCDF	ug/l	ND	ND	0/5	0.0%	ND	ND	0/2	0.0%
7429-90-5	Metals	D	Aluminum	mg/l	ND	0.091	3/39	7.7%	ND	ND	0/8	0.0%
7429-90-5	Metals	T	Aluminum	mg/l	1.1	0.76	38/39	97%	0.88	0.71	8/8	100%
7440-36-0	Metals	D	Antimony	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7440-36-0	Metals	T	Antimony	mg/l	ND	0.0099	1/39	2.6%	ND	ND	0/8	0.0%
7440-38-2	Metals	D	Arsenic	mg/l	ND	0.0062	1/39	2.6%	ND	0.011	1/8	13%
7440-38-2	Metals	T	Arsenic	mg/l	0.0061	0.0049	7/39	18%	ND	ND	0/8	0.0%
7440-39-3	Metals	D	Barium	mg/l	0.054	0.052	39/39	100%	0.051	0.050	8/8	100%
7440-39-3	Metals	T	Barium	mg/l	0.065	0.061	39/39	100%	0.061	0.059	8/8	100%
7440-41-7	Metals	D	Beryllium	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7440-41-7	Metals	T	Beryllium	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7440-43-9	Metals	D	Cadmium	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7440-43-9	Metals	T	Cadmium	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7440-70-2	Metals	D	Calcium	mg/l	53	51	39/39	100%	50	50	8/8	100%
7440-70-2	Metals	T	Calcium	mg/l	54	51	39/39	100%	53	51	8/8	100%
7440-47-3	Metals	D	Chromium	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7440-47-3	Metals	T	Chromium	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%

Table 3-14. Concentrations and frequency of detection of all target analytes in Surface Water collected from aquatic sampling sites in Mississippi River in 2002.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
7440-48-4	Metals	D	Cobalt	mg/l	ND	0.0047	3/39	7.7%	ND	ND	0/8	0.0%
7440-48-4	Metals	T	Cobalt	mg/l	ND	0.0042	9/39	23%	ND	0.0045	1/8	13%
7440-50-8	Metals	D	Copper	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7440-50-8	Metals	T	Copper	mg/l	0.039	0.010	2/39	5.1%	ND	ND	0/8	0.0%
7439-89-6	Metals	D	Iron	mg/l	0.087	0.039	28/39	72%	0.032	0.028	7/8	88%
7439-89-6	Metals	T	Iron	mg/l	1.4	1.1	39/39	100%	1.1	0.97	8/8	100%
7439-92-1	Metals	D	Lead	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7439-92-1	Metals	T	Lead	mg/l	0.0049	0.0026	5/39	13%	ND	ND	0/8	0.0%
7439-95-4	Metals	D	Magnesium	mg/l	22	20	39/39	100%	20	20	8/8	100%
7439-95-4	Metals	T	Magnesium	mg/l	22	20	39/39	100%	21	21	8/8	100%
7439-96-5	Metals	D	Manganese	mg/l	ND	0.0049	1/39	2.6%	ND	ND	0/8	0.0%
7439-96-5	Metals	T	Manganese	mg/l	0.14	0.086	38/39	97%	0.084	0.081	8/8	100%
7439-97-6	Metals	D	Mercury	mg/l	0.00012	0.00010	3/39	7.7%	ND	ND	0/8	0.0%
7439-97-6	Metals	T	Mercury	mg/l	0.00020	0.00010	3/39	7.7%	ND	ND	0/8	0.0%
7440-02-0	Metals	D	Nickel	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7440-02-0	Metals	T	Nickel	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7440-09-7	Metals	D	Potassium	mg/l	3.6	3.4	39/39	100%	3.3	3.2	8/8	100%
7440-09-7	Metals	T	Potassium	mg/l	3.7	3.5	39/39	100%	3.5	3.4	8/8	100%
7782-49-2	Metals	D	Selenium	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7782-49-2	Metals	T	Selenium	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7440-22-4	Metals	D	Silver	mg/l	ND	0.0049	1/39	2.6%	ND	ND	0/8	0.0%
7440-22-4	Metals	T	Silver	mg/l	ND	0.0049	1/39	2.6%	ND	ND	0/8	0.0%
7440-23-5	Metals	D	Sodium	mg/l	24	20	39/39	100%	20	18	8/8	100%
7440-23-5	Metals	T	Sodium	mg/l	24	20	39/39	100%	20	18	8/8	100%
7440-28-0	Metals	D	Thallium	mg/l	ND	ND	0/39	0.0%	ND	ND	0/8	0.0%
7440-28-0	Metals	T	Thallium	mg/l	ND	ND	0/39	0.0%	0.0052	0.0050	1/8	13%
7440-62-2	Metals	D	Vanadium	mg/l	0.010	0.0050	3/39	7.7%	ND	0.0028	5/8	63%
7440-62-2	Metals	T	Vanadium	mg/l	ND	0.0049	3/39	7.7%	ND	0.0048	1/8	13%
7440-66-6	Metals	D	Zinc	mg/l	0.036	0.011	5/39	13%	ND	ND	0/8	0.0%
7440-66-6	Metals	T	Zinc	mg/l	0.041	0.0099	15/39	38%	ND	0.0093	1/8	13%

Table 3-15. Concentrations and frequency of detection of all target analytes in Surface Water collected from aquatic sampling sites in Mississippi River in 2005.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
71-55-6	VOCs	T	1,1,1-Trichloroethane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
79-34-5	VOCs	T	1,1,2,2-Tetrachloroethane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
79-00-5	VOCs	T	1,1,2-Trichloroethane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-34-3	VOCs	T	1,1-Dichloroethane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-35-4	VOCs	T	1,1-Dichloroethylene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
120-82-1	VOCs	T	1,2,4-Trichlorobenzene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
95-50-1	VOCs	T	1,2-Dichlorobenzene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
107-06-2	VOCs	T	1,2-Dichloroethane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
540-59-0	VOCs	T	1,2-Dichloroethene (total)	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
78-87-5	VOCs	T	1,2-Dichloropropane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
541-73-1	VOCs	T	1,3-Dichlorobenzene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
106-46-7	VOCs	T	1,4-Dichlorobenzene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
108-60-1	VOCs	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
78-93-3	VOCs	T	2-Butanone (MEK)	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
108-10-1	VOCs	T	4-Methyl-2-pentanone (MIBK)	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
67-64-1	VOCs	T	Acetone	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
71-43-2	VOCs	T	Benzene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-27-4	VOCs	T	Bromodichloromethane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-25-2	VOCs	T	Bromoform	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
74-83-9	VOCs	T	Bromomethane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-15-0	VOCs	T	Carbon Disulfide	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
56-23-5	VOCs	T	Carbon Tetrachloride	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
108-90-7	VOCs	T	Chlorobenzene	ug/l	4.3	0.88	3/10	30%	ND	ND	0/8	0.0%
124-48-1	VOCs	T	Chlorodibromomethane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-00-3	VOCs	T	Chloroethane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
67-66-3	VOCs	T	Chloroform	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
74-87-3	VOCs	T	Chloromethane	ug/l	ND	ND	0/10	0.0%	0.50	0.47	1/8	13%
10061-01-5	VOCs	T	cis-1,3-Dichloropropene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-09-2	VOCs	T	Dichloromethane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
100-41-4	VOCs	T	Ethylbenzene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
591-78-6	VOCs	T	Methyl N-Butyl Ketone	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
100-42-5	VOCs	T	Styrene (Monomer)	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
127-18-4	VOCs	T	Tetrachloroethene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
108-88-3	VOCs	T	Toluene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
79-01-6	VOCs	T	Trichloroethylene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-01-4	VOCs	T	Vinyl chloride	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
1330-20-7	VOCs	T	Xylenes, Total	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
95-95-4	SVOCs	T	2,4,5-Trichlorophenol	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
88-06-2	SVOCs	T	2,4,6-Trichlorophenol	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
120-83-2	SVOCs	T	2,4-Dichlorophenol	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
105-67-9	SVOCs	T	2,4-Dimethylphenol	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
51-28-5	SVOCs	T	2,4-Dinitrophenol	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
121-14-2	SVOCs	T	2,4-Dinitrotoluene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
606-20-2	SVOCs	T	2,6-Dinitrotoluene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
91-58-7	SVOCs	T	2-Chloronaphthalene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%

Table 3-15. Concentrations and frequency of detection of all target analytes in Surface Water collected from aquatic sampling sites in Mississippi River in 2005.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
95-57-8	SVOCs	T	2-Chlorophenol	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
91-57-6	SVOCs	T	2-Methylnaphthalene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
95-48-7	SVOCs	T	2-Methylphenol (o-Cresol)	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
88-74-4	SVOCs	T	2-Nitroaniline	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
88-75-5	SVOCs	T	2-Nitrophenol	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
91-94-1	SVOCs	T	3,3'-Dichlorobenzidine	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
106-44-5	SVOCs	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
99-09-2	SVOCs	T	3-Nitroaniline	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
534-52-1	SVOCs	T	4,6-Dinitro-2-methylphenol	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
101-55-3	SVOCs	T	4-Bromophenyl Phenyl Ether	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
59-50-7	SVOCs	T	4-Chloro-3-methylphenol	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7005-72-3	SVOCs	T	4-Chlorophenyl Phenyl Ether	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
100-02-7	SVOCs	T	4-Nitrophenol	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
83-32-9	SVOCs	T	Acenaphthene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
208-96-8	SVOCs	T	Acenaphthylene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
120-12-7	SVOCs	T	Anthracene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
56-55-3	SVOCs	T	Benzo(a)anthracene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
50-32-8	SVOCs	T	Benzo(a)pyrene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
205-99-2	SVOCs	T	Benzo(b)fluoranthene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
191-24-2	SVOCs	T	Benzo(g,h,i)perylene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
207-08-9	SVOCs	T	Benzo(k)fluoranthene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
85-68-7	SVOCs	T	Benzyl Butyl Phthalate	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
111-91-1	SVOCs	T	bis(2-Chloroethoxy)methane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
111-44-4	SVOCs	T	bis(2-Chloroethyl)ether	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
117-81-7	SVOCs	T	bis(2-Ethylhexyl)phthalate	ug/l	ND	ND	0/10	0.0%	14	6.1	1/8	13%
86-74-8	SVOCs	T	Carbazole	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
218-01-9	SVOCs	T	Chrysene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
53-70-3	SVOCs	T	Dibenzo(a,h)anthracene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
132-64-9	SVOCs	T	Dibenzofuran	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
84-66-2	SVOCs	T	Diethyl Phthalate	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
131-11-3	SVOCs	T	Dimethyl Phthalate	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
84-74-2	SVOCs	T	Di-n-butylphthalate	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
117-84-0	SVOCs	T	Di-n-octylphthalate	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
206-44-0	SVOCs	T	Fluoranthene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
86-73-7	SVOCs	T	Fluorene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
118-74-1	SVOCs	T	Hexachlorobenzene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
87-68-3	SVOCs	T	Hexachlorobutadiene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
77-47-4	SVOCs	T	Hexachlorocyclopentadiene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
67-72-1	SVOCs	T	Hexachloroethane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
193-39-5	SVOCs	T	Indeno(1,2,3-cd)pyrene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
78-59-1	SVOCs	T	Isophorone	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
91-20-3	SVOCs	T	Naphthalene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
98-95-3	SVOCs	T	Nitrobenzene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
621-64-7	SVOCs	T	N-Nitroso-di-n-propylamine	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
86-30-6	SVOCs	T	N-Nitrosodiphenylamine	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
106-47-8	SVOCs	T	P-Chloroaniline	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%

Table 3-15. Concentrations and frequency of detection of all target analytes in Surface Water collected from aquatic sampling sites in Mississippi River in 2005.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
87-86-5	SVOCs	T	Pentachlorophenol	ug/l	ND	ND	0/10	0.0%	ND	0.48	1/8	13%
85-01-8	SVOCs	T	Phenanthrene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
108-95-2	SVOCs	T	Phenol	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
100-01-6	SVOCs	T	P-Nitroaniline	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
129-00-0	SVOCs	T	Pyrene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
10061-02-6	SVOCs	T	trans-1,3-Dichloropropene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
72-54-8	Pesticides	T	4,4'-DDD	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
72-55-9	Pesticides	T	4,4'-DDE	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
50-29-3	Pesticides	T	4,4'-DDT	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
309-00-2	Pesticides	T	Aldrin	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
319-84-6	Pesticides	T	alpha-BHC	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
5103-71-9	Pesticides	T	alpha-Chlordane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
319-85-7	Pesticides	T	beta-BHC	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
319-86-8	Pesticides	T	delta-BHC	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
60-57-1	Pesticides	T	Dieldrin	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
959-98-8	Pesticides	T	Endosulfan I	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
33213-65-9	Pesticides	T	Endosulfan II	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
1031-07-8	Pesticides	T	Endosulfan Sulfate	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
72-20-8	Pesticides	T	Endrin	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7421-93-4	Pesticides	T	Endrin Aldehyde	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
53494-70-5	Pesticides	T	Endrin Ketone	ug/l	ND	ND	0/10	0.0%	ND	0.026	6/8	75%
58-89-9	Pesticides	T	gamma-BHC (Lindane)	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
5103-74-2	Pesticides	T	gamma-Chlordane	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
76-44-8	Pesticides	T	Heptachlor	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
1024-57-3	Pesticides	T	Heptachlor Epoxide	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
72-43-5	Pesticides	T	Methoxychlor	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
8001-35-2	Pesticides	T	Toxaphene	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
93-76-5	Herbicides	T	2,4,5-T	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
93-72-1	Herbicides	T	2,4,5-TP (Silvex)	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
94-75-7	Herbicides	T	2,4-D	ug/l	1.2	0.41	4/10	40%	ND	ND	0/8	0.0%
94-82-6	Herbicides	T	2,4-DB	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
75-99-0	Herbicides	T	Dalapon	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
1918-00-9	Herbicides	T	Dicamba	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
120-36-5	Herbicides	T	Dichlorprop	ug/l	ND	0.23	1/10	10%	ND	ND	0/8	0.0%
88-85-7	Herbicides	T	Dinoseb	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
94-74-6	Herbicides	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
93-65-2	Herbicides	T	MCPP	ug/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7429-90-5	Metals	D	Aluminum	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7429-90-5	Metals	T	Aluminum	mg/l	3.8	2.6	10/10	100%	0.88	0.71	8/8	100%
7440-36-0	Metals	D	Antimony	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-36-0	Metals	T	Antimony	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-38-2	Metals	D	Arsenic	mg/l	0.0077	0.0054	4/10	40%	ND	0.011	1/8	13%
7440-38-2	Metals	T	Arsenic	mg/l	0.0066	0.0054	5/10	50%	ND	ND	0/8	0.0%
7440-39-3	Metals	D	Barium	mg/l	0.076	0.072	10/10	100%	0.051	0.050	8/8	100%
7440-39-3	Metals	T	Barium	mg/l	0.12	0.10	10/10	100%	0.061	0.059	8/8	100%

Table 3-15. Concentrations and frequency of detection of all target analytes in Surface Water collected from aquatic sampling sites in Mississippi River in 2005.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
7440-41-7	Metals	D	Beryllium	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-41-7	Metals	T	Beryllium	mg/l	ND	0.00089	6/10	60%	ND	ND	0/8	0.0%
7440-43-9	Metals	D	Cadmium	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-43-9	Metals	T	Cadmium	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-70-2	Metals	D	Calcium	mg/l	45	43	10/10	100%	50	50	8/8	100%
7440-70-2	Metals	T	Calcium	mg/l	46	45	10/10	100%	53	51	8/8	100%
7440-47-3	Metals	D	Chromium	mg/l	ND	0.0046	1/10	10%	ND	ND	0/8	0.0%
7440-47-3	Metals	T	Chromium	mg/l	0.0047	0.0034	10/10	100%	ND	ND	0/8	0.0%
7440-48-4	Metals	D	Cobalt	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-48-4	Metals	T	Cobalt	mg/l	ND	0.0016	9/10	90%	ND	0.0045	1/8	13%
7440-50-8	Metals	D	Copper	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-50-8	Metals	T	Copper	mg/l	0.0050	0.0035	10/10	100%	ND	ND	0/8	0.0%
7439-89-6	Metals	D	Iron	mg/l	ND	ND	0/10	0.0%	0.032	0.028	7/8	88%
7439-89-6	Metals	T	Iron	mg/l	3.5	2.5	10/10	100%	1.1	0.97	8/8	100%
7439-92-1	Metals	D	Lead	mg/l	0.0027	0.0025	3/10	30%	ND	ND	0/8	0.0%
7439-92-1	Metals	T	Lead	mg/l	0.0047	0.0035	8/10	80%	ND	ND	0/8	0.0%
7439-95-4	Metals	D	Magnesium	mg/l	22	21	10/10	100%	20	20	8/8	100%
7439-95-4	Metals	T	Magnesium	mg/l	22	21	10/10	100%	21	21	8/8	100%
7439-96-5	Metals	D	Manganese	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7439-96-5	Metals	T	Manganese	mg/l	0.25	0.20	10/10	100%	0.084	0.081	8/8	100%
7439-97-6	Metals	D	Mercury	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7439-97-6	Metals	T	Mercury	mg/l	ND	0.000099	1/10	10%	ND	ND	0/8	0.0%
7440-02-0	Metals	D	Nickel	mg/l	ND	0.0077	7/10	70%	ND	ND	0/8	0.0%
7440-02-0	Metals	T	Nickel	mg/l	0.0065	0.0050	10/10	100%	ND	ND	0/8	0.0%
7440-09-7	Metals	D	Potassium	mg/l	4.9	4.6	10/10	100%	3.3	3.2	8/8	100%
7440-09-7	Metals	T	Potassium	mg/l	5.5	5.2	10/10	100%	3.5	3.4	8/8	100%
7782-49-2	Metals	D	Selenium	mg/l	0.0075	0.0045	1/10	10%	ND	ND	0/8	0.0%
7782-49-2	Metals	T	Selenium	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-22-4	Metals	D	Silver	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-22-4	Metals	T	Silver	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-23-5	Metals	D	Sodium	mg/l	34	31	10/10	100%	20	18	8/8	100%
7440-23-5	Metals	T	Sodium	mg/l	35	31	10/10	100%	20	18	8/8	100%
7440-28-0	Metals	D	Thallium	mg/l	ND	ND	0/10	0.0%	ND	ND	0/8	0.0%
7440-28-0	Metals	T	Thallium	mg/l	ND	0.012	1/10	10%	0.0052	0.0050	1/8	13%
7440-62-2	Metals	D	Vanadium	mg/l	0.0043	0.0033	10/10	100%	ND	0.0028	5/8	63%
7440-62-2	Metals	T	Vanadium	mg/l	0.011	0.0088	10/10	100%	ND	0.0048	1/8	13%
7440-66-6	Metals	D	Zinc	mg/l	ND	0.0063	7/10	70%	ND	ND	0/8	0.0%
7440-66-6	Metals	T	Zinc	mg/l	0.065	0.026	10/10	100%	ND	0.0093	1/8	13%

Table 3-16. Concentrations and frequency of detection of all target analytes in Surface Water collected from aquatic sampling sites in Mississippi River in 2007.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
71-55-6	VOCs	T	1,1,1-Trichloroethane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
79-34-5	VOCs	T	1,1,2,2-Tetrachloroethane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
79-00-5	VOCs	T	1,1,2-Trichloroethane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
75-34-3	VOCs	T	1,1-Dichloroethane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
75-35-4	VOCs	T	1,1-Dichloroethylene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
120-82-1	VOCs	T	1,2,4-Trichlorobenzene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
95-50-1	VOCs	T	1,2-Dichlorobenzene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
107-06-2	VOCs	T	1,2-Dichloroethane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
540-59-0	VOCs	T	1,2-Dichloroethene (total)	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
78-87-5	VOCs	T	1,2-Dichloropropane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
541-73-1	VOCs	T	1,3-Dichlorobenzene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
106-46-7	VOCs	T	1,4-Dichlorobenzene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
108-60-1	VOCs	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
78-93-3	VOCs	T	2-Butanone (MEK)	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
108-10-1	VOCs	T	4-Methyl-2-pentanone (MIBK)	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
67-64-1	VOCs	T	Acetone	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
71-43-2	VOCs	T	Benzene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
75-27-4	VOCs	T	Bromodichloromethane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
75-25-2	VOCs	T	Bromoform	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
74-83-9	VOCs	T	Bromomethane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
75-15-0	VOCs	T	Carbon Disulfide	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
56-23-5	VOCs	T	Carbon Tetrachloride	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
108-90-7	VOCs	T	Chlorobenzene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
124-48-1	VOCs	T	Chlorodibromomethane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
75-00-3	VOCs	T	Chloroethane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
67-66-3	VOCs	T	Chloroform	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
74-87-3	VOCs	T	Chloromethane	ug/l	ND	ND	0/5	0.0%	0.50	0.47	1/8	13%
10061-01-5	VOCs	T	cis-1,3-Dichloropropene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
75-09-2	VOCs	T	Dichloromethane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
100-41-4	VOCs	T	Ethylbenzene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
591-78-6	VOCs	T	Methyl N-Butyl Ketone	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
100-42-5	VOCs	T	Styrene (Monomer)	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
127-18-4	VOCs	T	Tetrachloroethene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
108-88-3	VOCs	T	Toluene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
79-01-6	VOCs	T	Trichloroethylene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
75-01-4	VOCs	T	Vinyl chloride	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
1330-20-7	VOCs	T	Xylenes, Total	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
95-95-4	SVOCs	T	2,4,5-Trichlorophenol	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
88-06-2	SVOCs	T	2,4,6-Trichlorophenol	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
120-83-2	SVOCs	T	2,4-Dichlorophenol	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
105-67-9	SVOCs	T	2,4-Dimethylphenol	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
51-28-5	SVOCs	T	2,4-Dinitrophenol	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
121-14-2	SVOCs	T	2,4-Dinitrotoluene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
606-20-2	SVOCs	T	2,6-Dinitrotoluene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
91-58-7	SVOCs	T	2-Chloronaphthalene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%

Table 3-16. Concentrations and frequency of detection of all target analytes in Surface Water collected from aquatic sampling sites in Mississippi River in 2007.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
95-57-8	SVOCs	T	2-Chlorophenol	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
91-57-6	SVOCs	T	2-Methylnaphthalene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
95-48-7	SVOCs	T	2-Methylphenol (o-Cresol)	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
88-74-4	SVOCs	T	2-Nitroaniline	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
88-75-5	SVOCs	T	2-Nitrophenol	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
91-94-1	SVOCs	T	3,3'-Dichlorobenzidine	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
106-44-5	SVOCs	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
99-09-2	SVOCs	T	3-Nitroaniline	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
534-52-1	SVOCs	T	4,6-Dinitro-2-methylphenol	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
101-55-3	SVOCs	T	4-Bromophenyl Phenyl Ether	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
59-50-7	SVOCs	T	4-Chloro-3-methylphenol	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7005-72-3	SVOCs	T	4-Chlorophenyl Phenyl Ether	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
100-02-7	SVOCs	T	4-Nitrophenol	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
83-32-9	SVOCs	T	Acenaphthene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
208-96-8	SVOCs	T	Acenaphthylene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
120-12-7	SVOCs	T	Anthracene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
56-55-3	SVOCs	T	Benzo(a)anthracene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
50-32-8	SVOCs	T	Benzo(a)pyrene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
205-99-2	SVOCs	T	Benzo(b)fluoranthene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
191-24-2	SVOCs	T	Benzo(g,h,i)perylene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
207-08-9	SVOCs	T	Benzo(k)fluoranthene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
85-68-7	SVOCs	T	Benzyl Butyl Phthalate	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
111-91-1	SVOCs	T	bis(2-Chloroethoxy)methane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
111-44-4	SVOCs	T	bis(2-Chloroethyl)ether	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
117-81-7	SVOCs	T	bis(2-Ethylhexyl)phthalate	ug/l	ND	ND	0/5	0.0%	14	6.1	1/8	13%
86-74-8	SVOCs	T	Carbazole	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
218-01-9	SVOCs	T	Chrysene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
53-70-3	SVOCs	T	Dibenzo(a,h)anthracene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
132-64-9	SVOCs	T	Dibenzofuran	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
84-66-2	SVOCs	T	Diethyl Phthalate	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
131-11-3	SVOCs	T	Dimethyl Phthalate	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
84-74-2	SVOCs	T	Di-n-butylphthalate	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
117-84-0	SVOCs	T	Di-n-octylphthalate	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
206-44-0	SVOCs	T	Fluoranthene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
86-73-7	SVOCs	T	Fluorene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
118-74-1	SVOCs	T	Hexachlorobenzene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
87-68-3	SVOCs	T	Hexachlorobutadiene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
77-47-4	SVOCs	T	Hexachlorocyclopentadiene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
67-72-1	SVOCs	T	Hexachloroethane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
193-39-5	SVOCs	T	Indeno(1,2,3-cd)pyrene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
78-59-1	SVOCs	T	Isophorone	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
91-20-3	SVOCs	T	Naphthalene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
98-95-3	SVOCs	T	Nitrobenzene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
621-64-7	SVOCs	T	N-Nitroso-di-n-propylamine	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
86-30-6	SVOCs	T	N-Nitrosodiphenylamine	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
106-47-8	SVOCs	T	P-Chloroaniline	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%

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CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
87-86-5	SVOCs	T	Pentachlorophenol	ug/l	ND	ND	0/5	0.0%	ND	0.48	1/8	13%
85-01-8	SVOCs	T	Phenanthrene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
108-95-2	SVOCs	T	Phenol	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
100-01-6	SVOCs	T	P-Nitroaniline	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
129-00-0	SVOCs	T	Pyrene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
10061-02-6	SVOCs	T	trans-1,3-Dichloropropene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
72-54-8	Pesticides	T	4,4'-DDD	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
72-55-9	Pesticides	T	4,4'-DDE	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
50-29-3	Pesticides	T	4,4'-DDT	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
309-00-2	Pesticides	T	Aldrin	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
319-84-6	Pesticides	T	alpha-BHC	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
5103-71-9	Pesticides	T	alpha-Chlordane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
319-85-7	Pesticides	T	beta-BHC	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
319-86-8	Pesticides	T	delta-BHC	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
60-57-1	Pesticides	T	Dieldrin	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
959-98-8	Pesticides	T	Endosulfan I	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
33213-65-9	Pesticides	T	Endosulfan II	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
1031-07-8	Pesticides	T	Endosulfan Sulfate	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
72-20-8	Pesticides	T	Endrin	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7421-93-4	Pesticides	T	Endrin Aldehyde	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
53494-70-5	Pesticides	T	Endrin Ketone	ug/l	ND	ND	0/5	0.0%	ND	0.026	6/8	75%
58-89-9	Pesticides	T	gamma-BHC (Lindane)	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
5103-74-2	Pesticides	T	gamma-Chlordane	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
76-44-8	Pesticides	T	Heptachlor	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
1024-57-3	Pesticides	T	Heptachlor Epoxide	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
72-43-5	Pesticides	T	Methoxychlor	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
8001-35-2	Pesticides	T	Toxaphene	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
93-76-5	Herbicides	T	2,4,5-T	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
93-72-1	Herbicides	T	2,4,5-TP (Silvex)	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
94-75-7	Herbicides	T	2,4-D	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
94-82-6	Herbicides	T	2,4-DB	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
75-99-0	Herbicides	T	Dalapon	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
1918-00-9	Herbicides	T	Dicamba	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
120-36-5	Herbicides	T	Dichlorprop	ug/l	0.16	0.12	5/5	100%	ND	ND	0/8	0.0%
88-85-7	Herbicides	T	Dinoseb	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
94-74-6	Herbicides	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
93-65-2	Herbicides	T	MCPP	ug/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7429-90-5	Metals	D	Aluminum	mg/l	ND	0.086	1/5	20%	ND	ND	0/8	0.0%
7440-36-0	Metals	D	Antimony	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7440-38-2	Metals	D	Arsenic	mg/l	ND	ND	0/5	0.0%	ND	0.011	1/8	13%
7440-39-3	Metals	D	Barium	mg/l	0.066	0.065	5/5	100%	0.051	0.050	8/8	100%
7440-41-7	Metals	D	Beryllium	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7440-43-9	Metals	D	Cadmium	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7440-70-2	Metals	D	Calcium	mg/l	59	58	5/5	100%	50	50	8/8	100%
7440-47-3	Metals	D	Chromium	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%

Table 3-16. Concentrations and frequency of detection of all target analytes in Surface Water collected from aquatic sampling sites in Mississippi River in 2007.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
					Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD
7440-48-4	Metals	D	Cobalt	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7440-50-8	Metals	D	Copper	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7439-89-6	Metals	D	Iron	mg/l	0.092	0.045	5/5	100%	0.032	0.028	7/8	88%
7439-92-1	Metals	D	Lead	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7439-95-4	Metals	D	Magnesium	mg/l	21	21	5/5	100%	20	20	8/8	100%
7439-96-5	Metals	D	Manganese	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7439-97-6	Metals	D	Mercury	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7440-02-0	Metals	D	Nickel	mg/l	ND	0.013	2/5	40%	ND	ND	0/8	0.0%
7440-09-7	Metals	D	Potassium	mg/l	4.6	4.5	5/5	100%	3.3	3.2	8/8	100%
7782-49-2	Metals	D	Selenium	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7440-22-4	Metals	D	Silver	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7440-23-5	Metals	D	Sodium	mg/l	34	33	5/5	100%	20	18	8/8	100%
7440-28-0	Metals	D	Thallium	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%
7440-62-2	Metals	D	Vanadium	mg/l	0.0026	0.0023	5/5	100%	ND	0.0028	5/8	63%
7440-66-6	Metals	D	Zinc	mg/l	ND	ND	0/5	0.0%	ND	ND	0/8	0.0%

Table 3-17. Summary of sediment toxicity test results using *Hyalella azteca* and *Chironomous tentans*

Sample ID	Toxicity Test Species			
	Hyalella azteca		***Chironomus tentans***	
	Mean Survival (%)	**Mean Growth (mg)***	**Mean Survival (%)**	**Mean Growth (mg)***
R1AD1S	98 (2.7)	0.19 (0.02)	70 (24.5)	1.54 (0.4)
R1AM1S	100 (0)	0.16 (0.02)	86 (20.0)	2.3 (0.3)
R1AU1S	98 (2.7)	0.19 (0.04)	83 (16.3)	2.51 (0.5)
R1BD1S	96 (6.5)	0.17 (0.05)	80 (22.8)	2.22 (0.4)
R1BM1S	92 (2.7)	0.17 (0.02)	82 (16.0)	1.82 (0.4)
R1BM2S	97 (4.5)	0.15 (0.03)	63 (21.6)	1.95 (0.4)
R1BU1S	99 (2.2)	0.18 (0.02)	77 (27.3)	1.98 (0.3)
R1CM1S	96 (5.5)	0.16 (0.03)	75 (21.7)	1.9 (0.3)
Control1	100 (0)	0.15 (0.03)	82 (21.4)	1.52 (0.3)
R2AD1S	89 (4.2)	0.14 (0.07)	80 (21.9)	1.43 (0.3)
R2AM1S	93 (8.4)	0.16 (0.02)	80 (20)	1.99 (0.8)
R2AM2S	93 (7.6)	0.18 (0.04)	90 (12.7)	1.75 (0.6)
R2AU1S	98 (2.7)	0.21 (0.09)	78 (9.8)	2.29 (0.7)
R2BD1S	97 (4.5)	0.17 (0.04)	90 (8.0)	1.75 (0.4)
R2BM1S	97 (4.5)	0.18 (0.03)	80 (16.7)	2.07 (0.4)
R2BU1S	92 (3.7)	0.2 (0.05)	83 (10.3)	1.9 (0.7)
R2CM1S	89 (9.6)	0.17 (0.04)	93 (8.2)	1.89 (0.6)
Control2	96 (4.2)	0.17 (0.02)	70 (16.7)	1.28 (0.5)
R3AD1S	96 (4.2)	0.16 (0.02)	73 (20.0)	2.15 (0.5)
R3AM1S	99 (2.2)	0.17 (0.03)	85 (12.2)	1.98 (0.2)
R3AU1S	97 (2.7)	0.17 (0.4)	85 (16.4)	2.14 (0.3)
R3BD1S	95 (11.1)	0.17 (0.02)	78 (13.3)	1.88 (0.7)
R3BM1S	96 (6.5)	0.18 (0.3)	85 (12.2)	2.22 (0.7)
R3BU1S	94 (13.4)	0.16 (0.05)	83 (16.3)	1.63 (0.9)
R3CM1S	93 (2.7)	0.17 (0.03)	72 (7.5)	1.57 (0.2)
Control3	96 (4.2)	0.17 (0.02)	70 (16.7)	1.28 (0.5)
R4AD1S	97 (2.7)	0.24(0.04)	72 (14.7)	1.36 (0.3)
R4AM1S	97 (2.7)	0.29 (0.05)	80 (17.9)	1.48 (0.5)
R4AU1S	97 (4.5)	0.26 (0.02)	82 (14.7)	1.29 (0.3)
R4BD1S	97 (2.7)	0.24 (0.03)	78 (18.3)	1.19 (0.3)
R4BM1S	100 (0)	0.24 (0.02)	92 (16.0)	1.22 (0.4)
R4BU1S	96 (2.2)	0.26 (0.02)	82 (13.2)	1.29 (0.3)
R4CM1S	95 (6.1)	0.26 (0.04)	70 (21.9)	1.39 (0.6)
R4CM2S	95 (5.0)	0.28 (0.04)	75 (13.8)	1.25 (0.3)
Control4	96 (6.5)	0.21 (0.04)	62 (18.3)	0.86 (0.2)
R5AM1S	96 (5.5)	0.23 (0.02)	77 (13.7)	2.18 (0.4)
R5AN1S	97 (4.5)	0.26 (0.02)	73 (17.5)	1.3 (0.1)
R5AU1S	100 (0)	0.25 (0.03)	85 (16.4)	2.27 (0.6)
R5BM1S	98 (2.7)	0.27 (0.02)	78 (13.2)	1.35 (0.3)
R5BN1S	99 (2.2)	0.28 (0.02)	83 (10.3)	1.38 (0.20
R5BU1S	94 (6.5)	0.24 (0.04)	80 (9.0)	1.53 (0.5)
R5CM1S	98 (2.7)	0.27 (0.05)	73 (16.3)	1.18 (0.3)
Control5	96 (6.5)	0.21 (0.04)	62 (18.3)	0.86 (0.2)
R6AD1S	98 (2.7)	0.23 (0.01)	73 (24.2)	2.45 (0.2)
R6AM1S	98 (4.5)	0.21 (0.03)	73 (15.1)	2.18 (0.2)
R6AM2S	93 (10.4)	0.24 (0.02)	82 (7.5)	1.79 (0.2)
R6AU1S	100 (0)	0.21 (0.02)	77 (16.3)	2.29 (0.2)
R6BM1S	98 (2.7)	0.25 (0.02)	82 (14.8)	2.24 (0.4)
R6BU1S	99 (2.2)	0.24 (0.03)	83 (10.3)	2.14 (0.1)
R6CM1S	98 (2.7)	0.25 (0.04)	83 (18.6)	1.49 (0.2)
Control6	99 (2.2)	0.2 (0.04)	90 (6.3)	1.15 (0.2)

NOTES:
Values in parentheses are standard deviation.
* Mean Growth reported as 'mass (mg) per organism'

Table 3-18. Summary of concentrations and frequency of detection of constituents of concern identified in *Corbicula Fulminea* (clams) in sediment bioaccumulation tests.

				Site Areas				Reference Area				Control				Fish Tissue
CAS	Chemical Class	Analyte	Conc Units	Max. Conc	Avg. Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	Max Conc	Avg Conc	Freq. Of Det (FOD)	%FOD	TRV Value
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	320	477	3/37	8.1%	ND	ND	0/8	0.0%	ND	ND	0/3	0.0%	
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg	71	484	1/37	2.7%	ND	ND	0/8	0.0%	ND	ND	0/3	0.0%	
87-86-5	SVOCs	Pentachlorophenol	ug/kg	160	15	1/37	2.7%	ND	ND	0/16	0.0%	ND	ND	0/6	0.0%	
72-55-9	Pesticides	4,4'-DDE	ug/kg	19	6.05	32/37	86.5%	14	9.85	8/8	100%	6.40	5.17	3/3	100%	1610
50-29-3	Pesticides	4,4'-DDT	ug/kg	3.50	4.96	1/37	2.7%	2.40	4.68	1/8	12.5%	ND	ND	0/3	0.0%	3900
93-76-5	Herbicides	2,4,5-T	ug/kg	4.60	7.02	1/37	2.7%	11	7.01	2/8	25.0%	ND	ND	0/3	0.0%	300
94-75-7	Herbicides	2,4-D	ug/kg	22	8.02	6/37	16.2%	21	11	5/8	62.5%	ND	ND	0/3	0.0%	
94-82-6	Herbicides	2,4-DB	ug/kg	8.80	6.72	4/37	10.8%	5.40	6.36	2/8	25.0%	4.90	4.40	1/3	33.3%	
120-36-5	Herbicides	Dichlorprop	ug/kg	35	53	14/37	37.8%	4.90	58	3/8	37.5%	ND	ND	0/3	0.0%	
94-74-6	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	ug/kg	480	1628	5/37	13.5%	3100	2263	1/8	12.5%	ND	ND	0/3	0.0%	
93-65-2	Herbicides	MCPP	ug/kg	7800	2018	12/37	32.4%	4500	2675	5/8	62.5%	ND	ND	0/3	0.0%	5740
3268-87-9	Dioxins	OCDD	pg/g	45	3.81	8/37	21.6%	11	2.48	1/8	12.5%	ND	ND	0/3	0.0%	
37871-00-4	Dioxins	Total HpCDD	pg/g	2.80	0.30	1/37	2.7%	ND	ND	0/8	0.0%	ND	ND	0/3	0.0%	
41903-57-5	Dioxins	Total TCDD	pg/g	1.00	0.14	2/37	5.4%	ND	ND	0/8	0.0%	ND	ND	0/3	0.0%	
55722-27-5	Dioxins	Total TCDF	pg/g	2.00	0.67	1/37	2.7%	ND	ND	0/8	0.0%	0.63	0.71	1/3	33.3%	
7429-90-5	Metals	Aluminum	mg/kg	70	31.25	37/37	100%	83	48.5	8/8	100%	61	46	3/3	100%	
7440-38-2	Metals	Arsenic	mg/kg	4.40	1.84	37/37	100%	2.20	1.11	7/8	87.5%	2.20	1.90	3/3	100%	
7440-39-3	Metals	Barium	mg/kg	200	94.62	37/37	100%	130	114	8/8	100%	88	75.00	3/3	100%	
7440-43-9	Metals	Cadmium	mg/kg	0.14	0.22	3/37	8.1%	ND	ND	0/8	0.0%	ND	ND	0/3	0.0%	
7440-47-3	Metals	Chromium	mg/kg	57	5.56	35/37	94.6%	5.00	2.25	5/8	62.5%	5.00	3.87	3/3	100%	
7440-48-4	Metals	Cobalt	mg/kg	1.40	0.50	31/37	83.8%	1.00	0.55	8/8	100%	0.64	0.46	3/3	100%	
7440-50-8	Metals	Copper	mg/kg	11	4.85	37/37	100%	8.00	5.35	8/8	100%	6.2	5.17	3/3	100%	
7439-89-6	Metals	Iron	mg/kg	960	354.05	37/37	100%	840	323	8/8	100%	360	307	3/3	100%	
7439-92-1	Metals	Lead	mg/kg	1.10	0.29	8/35	22.9%	ND	ND	0/8	0.0%	ND	ND	0/3	0.0%	
7439-95-4	Metals	Magnesium	mg/kg	89	58.24	37/37	100%	120	77	8/8	100%	110	74	3/3	100%	
7439-96-5	Metals	Manganese	mg/kg	1300	257.54	37/37	100%	840	425	8/8	100%	480	210	3/3	100%	
7439-97-6	Metals	Mercury	mg/kg	0.013	0.0076	27/37	73.0%	0.0099	0.0077	4/8	50.0%	0.0093	0.01	2/3	66.7%	
7440-02-0	Metals	Nickel	mg/kg	25	1.69	35/37	94.6%	1.1	0.79	8/8	100%	1.1	0.83	3/3	100%	
7440-09-7	Metals	Potassium	mg/kg	190	108.54	37/37	100%	150	107	8/8	100%	150	112	3/3	100%	
7440-23-5	Metals	Sodium	mg/kg	3200	2303	37/37	100%	2300	1938	8/8	100%	2900	2167	3/3	100%	
7440-62-2	Metals	Vanadium	mg/kg	1.70	0.63	16/37	43.2%	1.60	0.74	4/8	50.0%	1.2	0.70	1/3	33.3%	
7440-66-6	Metals	Zinc	mg/kg	13	4.43	37/37	100%	10	5.34	8/8	100%	6.8	4.53	3/3	100%	

Table 3-19. Summary of surface water toxicity testing results using *Pimephales promelas* (fathead minnow) and *Ceriodaphnia dubia*

	Toxicity Test Species					
	P. promelas			*C. dubia*		
Sample ID	Mean Acute Survival (%)	Mean Chronic Survival (%)	Mean Growth (mg)	Mean Acute Survival (%)	Mean Chronic Survival (%)	Neonate Production (n)
R1AD1W	90 (20)	90 (20)	0.37 (0.11)	100 (0)	90 (31)	34 (6.8)
R1AM1W	100 (0)	100 (0)	0.33 (0.03)	100 (0)	100 (0)	33 (11.6)
R1AU1W	98 (5.0)	93 (9.6)	0.36 (0.06)	100 (0)	100 (0)	35 (8.1)
R1BD1W	98 (5.0)	95 (10)	0.36 (0.03)	100 (0)	90 (31)	32 (9.8)
R1BM1W	100 (0)	100 (0)	0.33 (0.05)	100 (0)	100 (0)	28 (11.9)
R1BM2W	100 (0)	98 (5.0)	0.29 (0.02)	100 (0)	100 (0)	35 (8.1)
R1BU1W	95 (10.0	95 (10)	0.37 (0.05)	100 (0)	100 (0)	31 (6.7)
R1CM1W	100 (0)	98 (5.0)	0.36 (0.02)	100 (0)	100 (0)	38 (2.3)
Control1	98 (5.0)	95 (5.8)	0.34 (0.03)	100 (0)	90 (31)	23 (8.2)
R2AD1W	93 (9.6)	90 (8.2)	0.4 (0.03)	100 (0)	100 (0)	34 (9.8)
R2AM1W	98 (5.0)	95 (5.8)	0.37 (0.03)	100 (0)	100 (0)	35 (8.9)
R2AM2W	90 (14.1)	90 (14.1)	0.39 (0.02)	100 (0)	100 (0)	39 (4.9)
R2AU1W	100 (0)	100 (0)	0.36 (0.02)	100 (0)	100 (0)	34 (5.9)
R2BD1W	98 (5.0)	98 (5.0)	0.35 (0.02)	100 (0)	100 (0)	40 (3.2)
R2BM1W	98 (5.0)	98 (5.0)	0.37 (0.03)	100 (0)	100 (0)	35 (8.5)
R2BU1W	90 (8.2)	88 (12.6)	0.38 (0.02)	100 (0)	100 (0)	37 (3.2)
R2CM1W	98 (5.0)	95 (5.8)	0.4 (0.02)	100 (0)	100 (0)	37 (2.7)
Contol2	98 (5.0	98 (5.0)	0.41 (0.04)	100 (0)	100 (0)	29 (7.7)
R3AD1W	98 (5.0)	98 (5.0)	0.32 (0.02)	100 (0)	100 (0)	9 (4.9)
R3AM1W	95 (10.0)	93 (9.6)	0.38 (0.03)	100 (0)	100 (0)	17 (5.8)
R3AU1W	98 (5.0)	88 (9.6)	0.32 (0.02)	0 (0)	0 (0)	0 (0)
R3BD1W	98 (5.0)	95 (5.8)	0.31 (0.02)	100 (0)	100 (0)	32 (7.8)
R3BM1W	93 (5.0)	93 (5.0)	0.38 (0.02)	100 (0)	100 (0)	17(4.1)
R3BU1W	95 (5.8)	95 (5.8)	0.32 (0.02)	100 (0)	100 (0)	6 (6.2)
R3CM1W	100 (0)	98 (5.0)	0.33 (0.04)	100 (0)	100 (0)	36 (4.3)
Control3	98 (5.0)	95 (5.8)	0.31 (0.01)	100 (0)	100 (0)	31 (8.0)
R4AD1W	80 (14.1)	78 (12.5)	0.48 (0.04)	100 (0)	70 (47)	9 (11.0)
R4AM1W	98 (5.0)	95 (10.0)	0.41 (0.04)	100 (0)	67 (49)	11 (13.1)
R4AU1W	93 (9.6)	93 (9.6)	0.46 (0.06)	100 (0)	90 (31)	17 (10.0)
R4BD1W	95 (10)	95 (10)	0.42 (0.03)	100 (0)	100 (0)	26 (9.3)
R4BM1W	98 (5.0)	95 (10.0)	0.44 (0.02)	100 (0)	100 (0)	22 (12.7)
R4BU1W	100 (0)	100 (0)	0.42 (0.02)	100 (0)	80 (41)	20 (10.2)
R4CM1W	85 (23.8)	80 (33.6)	0.53 (0.17)	100 (0)	100 (0)	19 (13.7)
R4CM2W	98 (5.0)	93 (9.6)	0.47 (0.05)	100 (0)	100 (0)	18 (12.7)
Control4	98 (5.0)	98 (5.0)	0.44 (0.02)	100 (0)	100 (0)	25(7.5)
R5AD1W	95 (5.8)	90 (10.0)	0.36 (0.03)	100 (0)	70 (47)	9 (7.7)
R5AM1W	90 (8.2)	88 (9.6)	0.36 (0.04)	100 (0)	100 (0)	9 (5.0)
R5AN1W	98 (5.0)	98 (9.0)	0.38 (0.03)	100 (0)	100 (0)	38 (4.4)
R5AU1W	100 (0)	100 (0)	0.37 (0.02)	100 (0)	100 (0)	33 (11.9)
R5BD1W	98 (5.0)	93 (9.6)	0.37 0.02)	100 (0)	80 (41)	17 (12.2)
R5BM1W	98 (5.0)	95 (5.8)	0.42 (0.03)	100 (0)	80 (41)	14 (12.8)
R5BN1W	88 (18.9)	88 (18.9)	0.41 (0.03)	100 (0)	100 (0)	35 (6.2)
R5BU1W	93 (9.6)	93 (9.6)	0.36 (0.03)	100 (0)	90 (31)	23 (15.4)
R5CM1W	93 (15.0)	93 (15.0)	0.38 (0.05)	100 (0)	100 (0)	15 (12.9)
Control5	100 (0)	98 (5.0)	0.37 (0.01)	100 (0)	100 (0)	17 (12.2)
R6AD1W	98 (5.0)	98 (5.0)	0.34 (0.03)	100 (0)	90 (31)	20 (12.8)
R6AM1W	93 (15.0)	93 (15.0)	0.37 (0.04)	100 (0)	70 (47)	21 (18.1)
R6AM2W	98 (5.0)	98 (5.0)	0.33 (0.03)	100 (0)	100 (0)	31 (11.4)
R6AU1W	95 (5.8)	95 (5.8)	0.34 (0.03)	100 (0)	80 (41)	18 (16.8)
R6BM1W	95 (10.0)	85 (23.8)	0.37 (0.02)	100 (0)	80 (41)	8 (13.4)
R6BU1W	100 (0)	98 (5.0)	0.33 (0.03)	100 (0)	90 (31)	19 (17.1)
R6CM1W	95 (5.8)	95 (5.8)	0.35 0.02)	100 (0)	100 (0)	29 (12.3)
Control6	93 (15.0)	90 (14.1)	0.39 (0.02)	100 (0)	90 (31)	26 (10.7)

NOTES :

1. Values in parentheses are standard deviation.

Table 3-20. Summary of concentrations and frequency of detection of target analytes in whole fish tissue composites from plume discharge areas (Site) and reference areas.

CAS	Chemical Class	Analyte	Units	Site (Plume Discharge Area)				Downstream Reference (DDA)				Upstream Reference (UDA)			
				Max Conc	Avg Conc	Freq. Detect	%FOD	Max Conc	Avg Conc	Freq. Detect	%FOD	Max Conc	Avg Conc	Freq. Detect	%FOD
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
95-50-1	SVOCs	1,2-Dichlorobenzene	ug/kg	240	228	4/9	44.4%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/kg	130	241	1/9	11.1%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
933-78-8	SVOCs	2,3,5-Trichlorophenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
933-7-5	SVOCs	2,3,6-Trichlorophenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
120-83-2	SVOCs	2,4-Dichlorophenol	ug/kg	190	227	3/9	33.3%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
105-67-9	SVOCs	2,4-Dimethylphenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
51-28-5	SVOCs	2,4-Dinitrophenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
91-58-7	SVOCs	2-Chloronaphthalene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
95-57-8	SVOCs	2-Chlorophenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
91-57-6	SVOCs	2-Methylnaphthalene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/kg	220	222	4/9	44.4%	340	317	3/3	100%	110	207	1/3	33.3%
88-74-4	SVOCs	2-Nitroaniline	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
88-75-5	SVOCs	2-Nitrophenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
99-09-2	SVOCs	3-Nitroaniline	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%

Table 3-20. Summary of concentrations and frequency of detection of target analytes in whole fish tissue composites from plume discharge areas (Site) and reference areas.

CAS	Chemical Class	Analyte	Units	Site (Plume Discharge Area)				Downstream Reference (DDA)				Upstream Reference (UDA)			
				Max Conc	Avg Conc	Freq. Detect	%FOD	Max Conc	Avg Conc	Freq. Detect	%FOD	Max Conc	Avg Conc	Freq. Detect	%FOD
106-47-8	SVOCs	4-Chloroaniline	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
100-01-6	SVOCs	4-Nitroaniline	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
100-02-7	SVOCs	4-Nitrophenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
83-32-9	SVOCs	Acenaphthene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
208-96-8	SVOCs	Acenaphthylene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
120-12-7	SVOCs	Anthracene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
85-68-7	SVOCs	Butylbenzylphthalate	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
86-74-8	SVOCs	Carbazole	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
218-01-9	SVOCs	Chrysene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
53-70-3	SVOCs	Dibenzo(a,h)anthracene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
132-64-9	SVOCs	Dibenzofuran	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
84-66-2	SVOCs	Diethylphthalate	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	110	207	1/3	33.3%
131-11-3	SVOCs	Dimethylphthalate	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
84-74-2	SVOCs	Di-n-butylphthalate	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
117-84-0	SVOCs	Di-n-octylphthalate	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
206-44-0	SVOCs	Fluoranthene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
86-73-7	SVOCs	Fluorene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
118-74-1	SVOCs	Hexachlorobenzene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
87-68-3	SVOCs	Hexachlorobutadiene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
67-72-1	SVOCs	Hexachloroethane	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
78-59-1	SVOCs	Isophorone	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%

Table 3-20. Summary of concentrations and frequency of detection of target analytes in whole fish tissue composites from plume discharge areas (Site) and reference areas.

CAS	Chemical Class	Analyte	Units	Site (Plume Discharge Area)				Downstream Reference (DDA)				Upstream Reference (UDA)			
				Max Conc	Avg Conc	Freq. Detect	%FOD	Max Conc	Avg Conc	Freq. Detect	%FOD	Max Conc	Avg Conc	Freq. Detect	%FOD
91-20-3	SVOCs	Naphthalene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
98-95-3	SVOCs	Nitrobenzene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
87-86-5 (SVOC)	SVOCs	Pentachlorophenol (SVOC)	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
85-01-8	SVOCs	Phenanthrene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
108-95-2	SVOCs	Phenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
129-00-0	SVOCs	Pyrene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
72-54-8	Pesticides	4,4'-DDD	ug/kg	6.70	11	2/9	22.2%	12	17	1/3	33.3%	ND	ND	0/3	0.0%
72-55-9	Pesticides	4,4'-DDE	ug/kg	60	18	8/9	88.9%	19	13	3/3	100%	25	21	2/3	66.7%
50-29-3	Pesticides	4,4'-DDT	ug/kg	13	13	1/9	11.1%	ND	ND	0/3	0.0%	7.60	15	1/3	33.3%
309-00-2	Pesticides	Aldrin	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
319-84-6	Pesticides	alpha-BHC	ug/kg	2.60	11	1/9	11.1%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
5103-71-9	Pesticides	alpha-Chlordane	ug/kg	14	12	2/9	22.2%	7.70	11	1/3	33.3%	ND	ND	0/3	0.0%
319-85-7	Pesticides	beta-BHC	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
319-86-8	Pesticides	delta-BHC	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
60-57-1	Pesticides	Dieldrin	ug/kg	64	15	7/9	77.8%	19	14	3/3	100%	32	21	2/3	66.7%
959-98-8	Pesticides	Endosulfan I	ug/kg	4.30	12	1/9	11.1%	ND	ND	0/3	0.0%	3.00	14	1/3	33.3%
33213-65-9	Pesticides	Endosulfan II	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
1031-07-8	Pesticides	Endosulfan sulfate	ug/kg	ND	ND	0/9	0.0%	12	17	1/3	33.3%	ND	ND	0/3	0.0%
72-20-8	Pesticides	Endrin	ug/kg	15	12	2/9	22.2%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
7421-93-4	Pesticides	Endrin aldehyde	ug/kg	10	12	2/9	22.2%	4.90	14	1/3	33.3%	7.40	13	2/3	66.7%
53494-70-5	Pesticides	Endrin ketone	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
5103-74-2	Pesticides	gamma-Chlordane	ug/kg	8.10	11	2/9	22.2%	3.5	13.67	1/3	33.3%	5.80	14	1/3	33.3%
76-44-8	Pesticides	Heptachlor	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
1024-57-3	Pesticides	Heptachlor epoxide	ug/kg	5.30	11	2/9	22.2%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
72-43-5	Pesticides	Methoxychlor	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
8001-35-2	Pesticides	Toxaphene	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
93-76-5	Herbicides	2,4,5-T	ug/kg	13	5.74	3/9	33.3%	ND	ND	0/3	0.0%	7.10	5.13	1/3	33.3%
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/kg	8.70	4.87	5/9	55.6%	6.90	4.98	2/3	66.7%	7.50	5.27	1/3	33.3%
94-75-7	Herbicides	2,4-D	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%

Table 3-20. Summary of concentrations and frequency of detection of target analytes in whole fish tissue composites from plume discharge areas (Site) and reference areas.

CAS	Chemical Class	Analyte	Units	Site (Plume Discharge Area)				Downstream Reference (DDA)				Upstream Reference (UDA)			
				Max Conc	Avg Conc	Freq. Detect	%FOD	Max Conc	Avg Conc	Freq. Detect	%FOD	Max Conc	Avg Conc	Freq. Detect	%FOD
94-82-6	Herbicides	2,4-DB	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
75-99-0	Herbicides	Dalapon	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
1918-00-9	Herbicides	Dicamba	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	6.50	7.23	2/3	66.7%
120-36-5	Herbicides	Dichloroprop	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
88-85-7	Herbicides	Dinoseb	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
94-74-6	Herbicides	MCPA	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
7085-19-0	Herbicides	MCPP	ug/kg	8600	2300	3/9	33.3%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
87-86-5	Herbicides	Pentachlorophenol	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
2051-24-3	PCBs	Decachlorobiphenyl	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
C-DICHLOROBI	PCBs	Dichlorobiphenyl	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
C-PENTBIPHEN	PCBs	Pentachlorobiphenyl	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
C-TOTAL-PCB	PCBs	Total Polychlorinated Biphenyls	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/kg	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD	pg/g	189	30	9/9	100%	119	45	3/3	100%	80	31	3/3	100%
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF	pg/g	4.30	0.68	1/9	11.1%	2.70	0.97	1/3	33.3%	ND	ND	0/3	0.0%
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD	pg/g	7.10	2.91	9/9	100%	4.30	3.07	3/3	100%	8.80	4.12	3/3	100%
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF	pg/g	1.00	0.14	1/9	11.1%	ND	ND	0/3	0.0%	0.59	0.22	1/3	33.3%
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/g	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD	pg/g	0.30	0.14	4/9	44.4%	0.58	0.22	1/3	33.3%	0.33	0.22	2/3	66.7%
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF	pg/g	0.84	0.35	5/9	55.6%	0.71	0.32	1/3	33.3%	0.85	0.59	3/3	100%
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD	pg/g	1.20	0.85	9/9	100%	2.00	0.90	3/3	100%	1.8	1.15	3/3	100%
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF	pg/g	0.22	0.11	4/9	44.4%	0.34	0.13	1/3	33.3%	0.26	0.16	2/3	66.7%
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD	pg/g	0.58	0.40	9/9	100%	0.78	0.41	3/3	100%	1.1	0.60	3/3	100%
72918-21-9	Dioxin	1,2,3,7,8,9-HxCDF	pg/g	ND	ND	0/9	0.0%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%
40321-76-4	Dioxin	1,2,3,7,8-PeCDD	pg/g	0.64	0.33	7/9	77.8%	1.20	0.49	2/3	66.7%	1	0.55	2/3	66.7%
57117-41-6	Dioxin	1,2,3,7,8-PeCDF	pg/g	0.43	0.07	1/9	11.1%	ND	ND	0/3	0.0%	ND	ND	0/3	0.0%

Table 3-20. Summary of concentrations and frequency of detection of target analytes in whole fish tissue composites from plume discharge areas (Site) and reference areas.

CAS	Chemical Class	Analyte	Units	Site (Plume Discharge Area)				Downstream Reference (DDA)				Upstream Reference (UDA)			
				Max Conc	Avg Conc	Freq. Detect	%FOD	Max Conc	Avg Conc	Freq. Detect	%FOD	Max Conc	Avg Conc	Freq. Detect	%FOD
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF	pg/g	0.48	0.19	6/9	66.7%	0.86	0.41	3/3	100%	0.30	0.22	2/3	66.7%
57117-31-4	Dioxin	2,3,4,7,8-PeCDF	pg/g	0.64	0.32	7/9	77.8%	1.00	0.41	2/3	66.7%	0.59	0.29	2/3	66.7%
1746-01-6	Dioxin	2,3,7,8-TCDD	pg/g	2.40	0.58	6/9	66.7%	0.96	0.44	2/3	66.7%	1.10	0.60	3/3	100%
51207-31-9	Dioxin	2,3,7,8-TCDF	pg/g	5.70	1.40	9/9	100%	1.00	0.62	3/3	100%	2.60	1.32	3/3	100%
37871-00-4	Dioxin	Total HpCDD	pg/g	14	4.01	9/9	100%	8.50	4.62	3/3	100%	12	5.50	3/3	100%
38998-75-3	Dioxin	Total HpCDF	pg/g	14	3.66	8/9	88.9%	8.50	5.63	3/3	100%	4.50	3.20	3/3	100%
34465-46-8	Dioxin	Total HxCDD	pg/g	3.30	2.07	7/9	77.8%	3.90	1.68	1/3	33.3%	4.90	2.72	2/3	66.7%
55684-94-1	Dioxin	Total HxCDF	pg/g	82	21	9/9	100%	42.10	31	3/3	100%	21.2	20	3/3	100%
36088-22-9	Dioxin	Total PeCDD	pg/g	7.50	2.99	9/9	100%	3.20	2.30	3/3	100%	3.00	2.37	3/3	100%
30402-15-4	Dioxin	Total PeCDF	pg/g	124	43	9/9	100%	94	60	3/3	100%	125	74	3/3	100%
41903-57-5	Dioxin	Total TCDD	pg/g	7.20	2.46	7/9	77.8%	1.40	0.69	2/3	66.7%	1.50	0.96	3/3	100%
55722-27-5	Dioxin	Total TCDF	pg/g	187	77	9/9	100%	216	125	3/3	100%	121	91	3/3	100%

Table 3-21. Calculation of TCDD-TEQ concentration from individual Dioxin/Furan congener concentrations in fish tissue.

Location	Sample ID	Congener Name	Units	Conc		TEF - Fish	Conc x TEF	TEQ
DDA	DDA Channel Catfish-Comp#1	1,2,3,4,6,7,8,9-OCDD	pg/g	11.3		0.0001	0.00113	
DDA	DDA Channel Catfish-Comp#1	1,2,3,4,6,7,8,9-OCDF	pg/g	0.34	UJ	0.0001	0.000017	
DDA	DDA Channel Catfish-Comp#1	1,2,3,4,6,7,8-HpCDD	pg/g	4.3		0.001	0.0043	
DDA	DDA Channel Catfish-Comp#1	1,2,3,4,7,8-HxCDD	pg/g	0.58	J	0.5	0.29	
DDA	DDA Channel Catfish-Comp#1	1,2,3,4,7,8-HxCDF	pg/g	0.71	J	0.1	0.071	
DDA	DDA Channel Catfish-Comp#1	1,2,3,6,7,8-HxCDD	pg/g	2	J	0.01	0.02	
DDA	DDA Channel Catfish-Comp#1	1,2,3,6,7,8-HxCDF	pg/g	0.34	J	0.1	0.034	
DDA	DDA Channel Catfish-Comp#1	1,2,3,7,8,9-HxCDD	pg/g	0.78	J	0.01	0.0078	
DDA	DDA Channel Catfish-Comp#1	1,2,3,7,8-PeCDD	pg/g	1.2	J	1	1.2	
DDA	DDA Channel Catfish-Comp#1	2,3,4,6,7,8-HxCDF	pg/g	0.86	J	0.1	0.086	
DDA	DDA Channel Catfish-Comp#1	2,3,4,7,8-PeCDF	pg/g	1	J	0.5	0.5	
DDA	DDA Channel Catfish-Comp#1	2,3,7,8-TCDD	pg/g	0.96		1	0.96	
DDA	DDA Channel Catfish-Comp#1	2,3,7,8-TCDF	pg/g	0.53		0.05	0.0265	3.200747
DDA	DDA Comp Shad	1,2,3,4,6,7,8,9-OCDD	pg/g	119		0.0001	0.0119	
DDA	DDA Comp Shad	1,2,3,4,6,7,8,9-OCDF	pg/g	2.7	J	0.0001	0.00027	
DDA	DDA Comp Shad	1,2,3,4,6,7,8-HpCDD	pg/g	4.3		0.001	0.0043	
DDA	DDA Comp Shad	1,2,3,4,7,8-HxCDD	pg/g	0.1	UJ	0.5	0.025	
DDA	DDA Comp Shad	1,2,3,4,7,8-HxCDF	pg/g	0.37	U	0.1	0.0185	
DDA	DDA Comp Shad	1,2,3,6,7,8-HxCDD	pg/g	0.37	J	0.01	0.0037	
DDA	DDA Comp Shad	1,2,3,6,7,8-HxCDF	pg/g	0.08	UJ	0.1	0.004	
DDA	DDA Comp Shad	1,2,3,7,8,9-HxCDD	pg/g	0.26	J	0.01	0.0026	
DDA	DDA Comp Shad	1,2,3,7,8-PeCDD	pg/g	0.24	J	1	0.24	
DDA	DDA Comp Shad	2,3,4,6,7,8-HxCDF	pg/g	0.18	J	0.1	0.018	
DDA	DDA Comp Shad	2,3,4,7,8-PeCDF	pg/g	0.21	J	0.5	0.105	
DDA	DDA Comp Shad	2,3,7,8-TCDD	pg/g	0.34	J	1	0.34	
DDA	DDA Comp Shad	2,3,7,8-TCDF	pg/g	1		0.05	0.05	0.82327
DDA	DDA Drum-Comp#1	1,2,3,4,6,7,8,9-OCDD	pg/g	4.5	J	0.0001	0.00045	
DDA	DDA Drum-Comp#1	1,2,3,4,6,7,8,9-OCDF	pg/g	0.1	U	0.0001	0.000005	
DDA	DDA Drum-Comp#1	1,2,3,4,6,7,8-HpCDD	pg/g	0.62	J	0.001	0.00062	
DDA	DDA Drum-Comp#1	1,2,3,4,7,8-HxCDD	pg/g	0.06	UJ	0.5	0.015	
DDA	DDA Drum-Comp#1	1,2,3,4,7,8-HxCDF	pg/g	0.14	U	0.1	0.007	
DDA	DDA Drum-Comp#1	1,2,3,6,7,8-HxCDD	pg/g	0.34	J	0.01	0.0034	
DDA	DDA Drum-Comp#1	1,2,3,6,7,8-HxCDF	pg/g	0.04	UJ	0.1	0.002	
DDA	DDA Drum-Comp#1	1,2,3,7,8,9-HxCDD	pg/g	0.2	J	0.01	0.002	
DDA	DDA Drum-Comp#1	1,2,3,7,8-PeCDD	pg/g	0.05	UJ	1	0.025	
DDA	DDA Drum-Comp#1	2,3,4,6,7,8-HxCDF	pg/g	0.2	J	0.1	0.02	
DDA	DDA Drum-Comp#1	2,3,4,7,8-PeCDF	pg/g	0.04	UJ	0.5	0.01	
DDA	DDA Drum-Comp#1	2,3,7,8-TCDD	pg/g	0.05	UJ	1	0.025	
DDA	DDA Drum-Comp#1	2,3,7,8-TCDF	pg/g	0.33	J	0.05	0.0165	0.126975
PDA	PDA Channel Catfish-Comp#1	1,2,3,4,6,7,8,9-OCDD	pg/g	7.7	J	0.0001	0.00077	
PDA	PDA Channel Catfish-Comp#1	1,2,3,4,6,7,8,9-OCDF	pg/g	0.21	UJ	0.0001	0.0000105	
PDA	PDA Channel Catfish-Comp#1	1,2,3,4,6,7,8-HpCDD	pg/g	3	J	0.001	0.003	
PDA	PDA Channel Catfish-Comp#1	1,2,3,4,6,7,8-HpCDF	pg/g	0.04	UJ	0.01	0.0002	
PDA	PDA Channel Catfish-Comp#1	1,2,3,4,7,8-HxCDD	pg/g	0.29	J	0.5	0.145	
PDA	PDA Channel Catfish-Comp#1	1,2,3,4,7,8-HxCDF	pg/g	0.29	UJ	0.1	0.0145	
PDA	PDA Channel Catfish-Comp#1	1,2,3,6,7,8-HxCDD	pg/g	1.1	J	0.01	0.011	
PDA	PDA Channel Catfish-Comp#1	1,2,3,6,7,8-HxCDF	pg/g	0.11	UJ	0.1	0.0055	
PDA	PDA Channel Catfish-Comp#1	1,2,3,7,8,9-HxCDD	pg/g	0.37	J	0.01	0.0037	
PDA	PDA Channel Catfish-Comp#1	1,2,3,7,8-PeCDD	pg/g	0.47	J	1	0.47	
PDA	PDA Channel Catfish-Comp#1	1,2,3,7,8-PeCDF	pg/g	0.03	UJ	0.05	0.00075	
PDA	PDA Channel Catfish-Comp#1	2,3,4,6,7,8-HxCDF	pg/g	0.13	UJ	0.1	0.0065	
PDA	PDA Channel Catfish-Comp#1	2,3,4,7,8-PeCDF	pg/g	0.52	J	0.5	0.26	
PDA	PDA Channel Catfish-Comp#1	2,3,7,8-TCDD	pg/g	0.6		1	0.6	
PDA	PDA Channel Catfish-Comp#1	2,3,7,8-TCDF	pg/g	0.35	J	0.05	0.0175	1.5384305
PDA	PDA Channel Catfish-Comp#2	1,2,3,4,6,7,8,9-OCDD	pg/g	9		0.0001	0.0009	
PDA	PDA Channel Catfish-Comp#2	1,2,3,4,6,7,8,9-OCDF	pg/g	0.23	U	0.0001	0.0000115	
PDA	PDA Channel Catfish-Comp#2	1,2,3,4,6,7,8-HpCDD	pg/g	4.1		0.001	0.0041	

Table 3-21. Calculation of TCDD-TEQ concentration from individual Dioxin/Furan congener concentrations in fish tissue.

Location	Sample ID	Congener Name	Units	Conc		TEF - Fish	Conc x TEF	TEQ
PDA	PDA Channel Catfish-Comp#2	1,2,3,4,6,7,8-HpCDF	pg/g	0.08	UJ	0.01	0.0004	
PDA	PDA Channel Catfish-Comp#2	1,2,3,4,7,8-HxCDD	pg/g	0.3	J	0.5	0.15	
PDA	PDA Channel Catfish-Comp#2	1,2,3,4,7,8-HxCDF	pg/g	0.43	J	0.1	0.043	
PDA	PDA Channel Catfish-Comp#2	1,2,3,6,7,8-HxCDD	pg/g	1.2	J	0.01	0.012	
PDA	PDA Channel Catfish-Comp#2	1,2,3,6,7,8-HxCDF	pg/g	0.17	J	0.1	0.017	
PDA	PDA Channel Catfish-Comp#2	1,2,3,7,8,9-HxCDD	pg/g	0.58	J	0.01	0.0058	
PDA	PDA Channel Catfish-Comp#2	1,2,3,7,8-PeCDD	pg/g	0.64	J	1	0.64	
PDA	PDA Channel Catfish-Comp#2	1,2,3,7,8-PeCDF	pg/g	0.07	UJ	0.05	0.00175	
PDA	PDA Channel Catfish-Comp#2	2,3,4,6,7,8-HxCDF	pg/g	0.22	J	0.1	0.022	
PDA	PDA Channel Catfish-Comp#2	2,3,4,7,8-PeCDF	pg/g	0.64	J	0.5	0.32	
PDA	PDA Channel Catfish-Comp#2	2,3,7,8-TCDD	pg/g	0.83		1	0.83	
PDA	PDA Channel Catfish-Comp#2	2,3,7,8-TCDF	pg/g	1.2		0.05	0.06	2.1069615
PDA	PDA Channel Catfish-Comp#3	1,2,3,4,6,7,8,9-OCDD	pg/g	10.6		0.0001	0.00106	
PDA	PDA Channel Catfish-Comp#3	1,2,3,4,6,7,8,9-OCDF	pg/g	0.23	U	0.0001	0.0000115	
PDA	PDA Channel Catfish-Comp#3	1,2,3,4,6,7,8-HpCDD	pg/g	4		0.001	0.004	
PDA	PDA Channel Catfish-Comp#3	1,2,3,4,6,7,8-HpCDF	pg/g	0.03	UJ	0.01	0.00015	
PDA	PDA Channel Catfish-Comp#3	1,2,3,4,7,8-HxCDD	pg/g	0.3	J	0.5	0.15	
PDA	PDA Channel Catfish-Comp#3	1,2,3,4,7,8-HxCDF	pg/g	0.28	U	0.1	0.014	
PDA	PDA Channel Catfish-Comp#3	1,2,3,6,7,8-HxCDD	pg/g	1.1	J	0.01	0.011	
PDA	PDA Channel Catfish-Comp#3	1,2,3,6,7,8-HxCDF	pg/g	0.1	UJ	0.1	0.005	
PDA	PDA Channel Catfish-Comp#3	1,2,3,7,8,9-HxCDD	pg/g	0.56	J	0.01	0.0056	
PDA	PDA Channel Catfish-Comp#3	1,2,3,7,8-PeCDD	pg/g	0.42	J	1	0.42	
PDA	PDA Channel Catfish-Comp#3	1,2,3,7,8-PeCDF	pg/g	0.03	UJ	0.05	0.00075	
PDA	PDA Channel Catfish-Comp#3	2,3,4,6,7,8-HxCDF	pg/g	0.16	J	0.1	0.016	
PDA	PDA Channel Catfish-Comp#3	2,3,4,7,8-PeCDF	pg/g	0.35	J	0.5	0.175	
PDA	PDA Channel Catfish-Comp#3	2,3,7,8-TCDD	pg/g	0.37	J	1	0.37	
PDA	PDA Channel Catfish-Comp#3	2,3,7,8-TCDF	pg/g	0.54		0.05	0.027	1.1995715
PDA	PDA Comp#1 Shad	1,2,3,4,6,7,8,9-OCDD	pg/g	6.8		0.0001	0.00068	
PDA	PDA Comp#1 Shad	1,2,3,4,6,7,8,9-OCDF	pg/g	0.72	U	0.0001	0.000036	
PDA	PDA Comp#1 Shad	1,2,3,4,6,7,8-HpCDD	pg/g	1.3	J	0.001	0.0013	
PDA	PDA Comp#1 Shad	1,2,3,4,6,7,8-HpCDF	pg/g	0.05	UJ	0.01	0.00025	
PDA	PDA Comp#1 Shad	1,2,3,4,7,8-HxCDD	pg/g	0.1	U	0.5	0.025	
PDA	PDA Comp#1 Shad	1,2,3,4,7,8-HxCDF	pg/g	0.25	U	0.1	0.0125	
PDA	PDA Comp#1 Shad	1,2,3,6,7,8-HxCDD	pg/g	0.45	J	0.01	0.0045	
PDA	PDA Comp#1 Shad	1,2,3,6,7,8-HxCDF	pg/g	0.07	U	0.1	0.0035	
PDA	PDA Comp#1 Shad	1,2,3,7,8,9-HxCDD	pg/g	0.24	J	0.01	0.0024	
PDA	PDA Comp#1 Shad	1,2,3,7,8-PeCDD	pg/g	0.32	J	1	0.32	
PDA	PDA Comp#1 Shad	1,2,3,7,8-PeCDF	pg/g	0.13	UJ	0.05	0.00325	
PDA	PDA Comp#1 Shad	2,3,4,6,7,8-HxCDF	pg/g	0.12	U	0.1	0.006	
PDA	PDA Comp#1 Shad	2,3,4,7,8-PeCDF	pg/g	0.19	J	0.5	0.095	
PDA	PDA Comp#1 Shad	2,3,7,8-TCDD	pg/g	0.28	J	1	0.28	
PDA	PDA Comp#1 Shad	2,3,7,8-TCDF	pg/g	0.92		0.05	0.046	0.800416
PDA	PDA Comp#2 Shad	1,2,3,4,6,7,8,9-OCDD	pg/g	15.1		0.0001	0.00151	
PDA	PDA Comp#2 Shad	1,2,3,4,6,7,8,9-OCDF	pg/g	0.25	U	0.0001	0.0000125	
PDA	PDA Comp#2 Shad	1,2,3,4,6,7,8-HpCDD	pg/g	2	J	0.001	0.002	
PDA	PDA Comp#2 Shad	1,2,3,4,6,7,8-HpCDF	pg/g	0.07	UJ	0.01	0.00035	
PDA	PDA Comp#2 Shad	1,2,3,4,7,8-HxCDD	pg/g	0.08	UJ	0.5	0.02	
PDA	PDA Comp#2 Shad	1,2,3,4,7,8-HxCDF	pg/g	0.84	J	0.1	0.084	
PDA	PDA Comp#2 Shad	1,2,3,6,7,8-HxCDD	pg/g	0.82	J	0.01	0.0082	
PDA	PDA Comp#2 Shad	1,2,3,6,7,8-HxCDF	pg/g	0.05	UJ	0.1	0.0025	
PDA	PDA Comp#2 Shad	1,2,3,7,8,9-HxCDD	pg/g	0.39	J	0.01	0.0039	
PDA	PDA Comp#2 Shad	1,2,3,7,8-PeCDD	pg/g	0.46	J	1	0.46	
PDA	PDA Comp#2 Shad	1,2,3,7,8-PeCDF	pg/g	0.06	UJ	0.05	0.0015	
PDA	PDA Comp#2 Shad	2,3,4,6,7,8-HxCDF	pg/g	0.48	J	0.1	0.048	
PDA	PDA Comp#2 Shad	2,3,4,7,8-PeCDF	pg/g	0.41	J	0.5	0.205	
PDA	PDA Comp#2 Shad	2,3,7,8-TCDD	pg/g	2.4		1	2.4	
PDA	PDA Comp#2 Shad	2,3,7,8-TCDF	pg/g	1.9		0.05	0.095	3.3319725

Table 3-21. Calculation of TCDD-TEQ concentration from individual Dioxin/Furan congener concentrations in fish tissue.

Location	Sample ID	Congener Name	Units	Conc		TEF - Fish	Conc x TEF	TEQ
PDA	PDA Comp#3 Shad	1,2,3,4,6,7,8,9-OCDD	pg/g	189	J	0.0001	0.0189	
PDA	PDA Comp#3 Shad	1,2,3,4,6,7,8,9-OCDF	pg/g	4.3	J	0.0001	0.00043	
PDA	PDA Comp#3 Shad	1,2,3,4,6,7,8-HpCDD	pg/g	7.1		0.001	0.0071	
PDA	PDA Comp#3 Shad	1,2,3,4,6,7,8-HpCDF	pg/g	1	J	0.01	0.01	
PDA	PDA Comp#3 Shad	1,2,3,4,7,8-HxCDD	pg/g	0.18	J	0.5	0.09	
PDA	PDA Comp#3 Shad	1,2,3,4,7,8-HxCDF	pg/g	0.46	J	0.1	0.046	
PDA	PDA Comp#3 Shad	1,2,3,6,7,8-HxCDD	pg/g	1.1	J	0.01	0.011	
PDA	PDA Comp#3 Shad	1,2,3,6,7,8-HxCDF	pg/g	0.19	J	0.1	0.019	
PDA	PDA Comp#3 Shad	1,2,3,7,8,9-HxCDD	pg/g	0.54	J	0.01	0.0054	
PDA	PDA Comp#3 Shad	1,2,3,7,8-PeCDD	pg/g	0.51	J	1	0.51	
PDA	PDA Comp#3 Shad	1,2,3,7,8-PeCDF	pg/g	0.43	J	0.05	0.0215	
PDA	PDA Comp#3 Shad	2,3,4,6,7,8-HxCDF	pg/g	0.3	J	0.1	0.03	
PDA	PDA Comp#3 Shad	2,3,4,7,8-PeCDF	pg/g	0.55	J	0.5	0.275	
PDA	PDA Comp#3 Shad	2,3,7,8-TCDD	pg/g	0.57		1	0.57	
PDA	PDA Comp#3 Shad	2,3,7,8-TCDF	pg/g	5.7		0.05	0.285	1.89933
PDA	PDA Drum Comp#1	1,2,3,4,6,7,8,9-OCDD	pg/g	16.5		0.0001	0.00165	
PDA	PDA Drum Comp#1	1,2,3,4,6,7,8,9-OCDF	pg/g	1.5	U	0.0001	0.000075	
PDA	PDA Drum Comp#1	1,2,3,4,6,7,8-HpCDD	pg/g	2.5	J	0.001	0.0025	
PDA	PDA Drum Comp#1	1,2,3,4,6,7,8-HpCDF	pg/g	0.08	UJ	0.01	0.0004	
PDA	PDA Drum Comp#1	1,2,3,4,7,8-HxCDD	pg/g	0.1	UJ	0.5	0.025	
PDA	PDA Drum Comp#1	1,2,3,4,7,8-HxCDF	pg/g	0.45	J	0.1	0.045	
PDA	PDA Drum Comp#1	1,2,3,6,7,8-HxCDD	pg/g	0.84	J	0.01	0.0084	
PDA	PDA Drum Comp#1	1,2,3,6,7,8-HxCDF	pg/g	0.22	J	0.1	0.022	
PDA	PDA Drum Comp#1	1,2,3,7,8,9-HxCDD	pg/g	0.38	J	0.01	0.0038	
PDA	PDA Drum Comp#1	1,2,3,7,8-PeCDD	pg/g	0.09	UJ	1	0.045	
PDA	PDA Drum Comp#1	1,2,3,7,8-PeCDF	pg/g	0.07	UJ	0.05	0.00175	
PDA	PDA Drum Comp#1	2,3,4,6,7,8-HxCDF	pg/g	0.24	J	0.1	0.024	
PDA	PDA Drum Comp#1	2,3,4,7,8-PeCDF	pg/g	0.07	UJ	0.5	0.0175	
PDA	PDA Drum Comp#1	2,3,7,8-TCDD	pg/g	0.14	UJ	1	0.07	
PDA	PDA Drum Comp#1	2,3,7,8-TCDF	pg/g	0.44	J	0.05	0.022	0.289075
PDA	PDA Drum Comp#2	1,2,3,4,6,7,8,9-OCDD	pg/g	5.3		0.0001	0.00053	
PDA	PDA Drum Comp#2	1,2,3,4,6,7,8,9-OCDF	pg/g	0.1	UJ	0.0001	0.000005	
PDA	PDA Drum Comp#2	1,2,3,4,6,7,8-HpCDD	pg/g	0.99	J	0.001	0.00099	
PDA	PDA Drum Comp#2	1,2,3,4,6,7,8-HpCDF	pg/g	0.06	UJ	0.01	0.0003	
PDA	PDA Drum Comp#2	1,2,3,4,7,8-HxCDD	pg/g	0.06	UJ	0.5	0.015	
PDA	PDA Drum Comp#2	1,2,3,4,7,8-HxCDF	pg/g	0.2	U	0.1	0.01	
PDA	PDA Drum Comp#2	1,2,3,6,7,8-HxCDD	pg/g	0.43	J	0.01	0.0043	
PDA	PDA Drum Comp#2	1,2,3,6,7,8-HxCDF	pg/g	0.11	U	0.1	0.0055	
PDA	PDA Drum Comp#2	1,2,3,7,8,9-HxCDD	pg/g	0.24	J	0.01	0.0024	
PDA	PDA Drum Comp#2	1,2,3,7,8-PeCDD	pg/g	0.06	UJ	1	0.03	
PDA	PDA Drum Comp#2	1,2,3,7,8-PeCDF	pg/g	0.04	UJ	0.05	0.001	
PDA	PDA Drum Comp#2	2,3,4,6,7,8-HxCDF	pg/g	0.11	U	0.1	0.0055	
PDA	PDA Drum Comp#2	2,3,4,7,8-PeCDF	pg/g	0.04	UJ	0.5	0.01	
PDA	PDA Drum Comp#2	2,3,7,8-TCDD	pg/g	0.05	UJ	1	0.025	
PDA	PDA Drum Comp#2	2,3,7,8-TCDF	pg/g	0.29	J	0.05	0.0145	0.125025

Table 3-21. Calculation of TCDD-TEQ concentration from individual Dioxin/Furan congener concentrations in fish tissue.

Location	Sample ID	Congener Name	Units	Conc		TEF - Fish	Conc x TEF	TEQ
PDA	PDA Drum-Comp#4	1,2,3,4,6,7,8,9-OCDD	pg/g	6.8		0.0001	0.00068	
PDA	PDA Drum-Comp#4	1,2,3,4,6,7,8,9-OCDF	pg/g	0.43	U	0.0001	0.0000215	
PDA	PDA Drum-Comp#4	1,2,3,4,6,7,8-HpCDD	pg/g	1.2	J	0.001	0.0012	
PDA	PDA Drum-Comp#4	1,2,3,4,6,7,8-HpCDF	pg/g	0.05	UJ	0.01	0.00025	
PDA	PDA Drum-Comp#4	1,2,3,4,7,8-HxCDD	pg/g	0.06	UJ	0.5	0.015	
PDA	PDA Drum-Comp#4	1,2,3,4,7,8-HxCDF	pg/g	0.47	J	0.1	0.047	
PDA	PDA Drum-Comp#4	1,2,3,6,7,8-HxCDD	pg/g	0.58	J	0.01	0.0058	
PDA	PDA Drum-Comp#4	1,2,3,6,7,8-HxCDF	pg/g	0.16	J	0.1	0.016	
PDA	PDA Drum-Comp#4	1,2,3,7,8,9-HxCDD	pg/g	0.29	J	0.01	0.0029	
PDA	PDA Drum-Comp#4	1,2,3,7,8-PeCDD	pg/g	0.1	J	1	0.1	
PDA	PDA Drum-Comp#4	1,2,3,7,8-PeCDF	pg/g	0.04	UJ	0.05	0.001	
PDA	PDA Drum-Comp#4	2,3,4,6,7,8-HxCDF	pg/g	0.16	J	0.1	0.016	
PDA	PDA Drum-Comp#4	2,3,4,7,8-PeCDF	pg/g	0.13	J	0.5	0.065	
PDA	PDA Drum-Comp#4	2,3,7,8-TCDD	pg/g	0.14	U	1	0.07	
PDA	PDA Drum-Comp#4	2,3,7,8-TCDF	pg/g	1.3	J	0.05	0.065	0.4058515
UDA	UDA Channel Catfish-Comp#1	1,2,3,4,6,7,8,9-OCDD	pg/g	8.1	J	0.0001	0.00081	
UDA	UDA Channel Catfish-Comp#1	1,2,3,4,6,7,8-HpCDD	pg/g	2.8		0.001	0.0028	
UDA	UDA Channel Catfish-Comp#1	1,2,3,4,6,7,8-HpCDF	pg/g	0.06	UJ	0.01	0.0003	
UDA	UDA Channel Catfish-Comp#1	1,2,3,4,7,8-HxCDD	pg/g	0.33	J	0.5	0.165	
UDA	UDA Channel Catfish-Comp#1	1,2,3,4,7,8-HxCDF	pg/g	0.42	J	0.1	0.042	
UDA	UDA Channel Catfish-Comp#1	1,2,3,6,7,8-HxCDD	pg/g	1.3	J	0.01	0.013	
UDA	UDA Channel Catfish-Comp#1	1,2,3,6,7,8-HxCDF	pg/g	0.19	J	0.1	0.019	
UDA	UDA Channel Catfish-Comp#1	1,2,3,7,8,9-HxCDD	pg/g	0.51	J	0.01	0.0051	
UDA	UDA Channel Catfish-Comp#1	1,2,3,7,8-PeCDD	pg/g	0.61	J	1	0.61	
UDA	UDA Channel Catfish-Comp#1	2,3,4,6,7,8-HxCDF	pg/g	0.27	J	0.1	0.027	
UDA	UDA Channel Catfish-Comp#1	2,3,4,7,8-PeCDF	pg/g	0.59	J	0.5	0.295	
UDA	UDA Channel Catfish-Comp#1	2,3,7,8-TCDD	pg/g	0.53		1	0.53	
UDA	UDA Channel Catfish-Comp#1	2,3,7,8-TCDF	pg/g	0.35	J	0.05	0.0175	1.72751
UDA	UDA Drum Comp	1,2,3,4,6,7,8,9-OCDD	pg/g	4.8	J	0.0001	0.00048	
UDA	UDA Drum Comp	1,2,3,4,6,7,8-HpCDD	pg/g	0.76	J	0.001	0.00076	
UDA	UDA Drum Comp	1,2,3,4,6,7,8-HpCDF	pg/g	0.06	UJ	0.01	0.0003	
UDA	UDA Drum Comp	1,2,3,4,7,8-HxCDD	pg/g	0.07	UJ	0.5	0.0175	
UDA	UDA Drum Comp	1,2,3,4,7,8-HxCDF	pg/g	0.51	J	0.1	0.051	
UDA	UDA Drum Comp	1,2,3,6,7,8-HxCDD	pg/g	0.36	J	0.01	0.0036	
UDA	UDA Drum Comp	1,2,3,6,7,8-HxCDF	pg/g	0.26	J	0.1	0.026	
UDA	UDA Drum Comp	1,2,3,7,8,9-HxCDD	pg/g	0.2	J	0.01	0.002	
UDA	UDA Drum Comp	1,2,3,7,8-PeCDD	pg/g	0.06	UJ	1	0.03	
UDA	UDA Drum Comp	2,3,4,6,7,8-HxCDF	pg/g	0.15	U	0.1	0.0075	
UDA	UDA Drum Comp	2,3,4,7,8-PeCDF	pg/g	0.05	UJ	0.5	0.0125	
UDA	UDA Drum Comp	2,3,7,8-TCDD	pg/g	0.17	J	1	0.17	
UDA	UDA Drum Comp	2,3,7,8-TCDF	pg/g	1	J	0.05	0.05	0.37164
UDA	UDA-UE Comp Shad	1,2,3,4,6,7,8,9-OCDD	pg/g	79.7		0.0001	0.00797	
UDA	UDA-UE Comp Shad	1,2,3,4,6,7,8-HpCDD	pg/g	8.8		0.001	0.0088	
UDA	UDA-UE Comp Shad	1,2,3,4,6,7,8-HpCDF	pg/g	0.59	J	0.01	0.0059	
UDA	UDA-UE Comp Shad	1,2,3,4,7,8-HxCDD	pg/g	0.3	J	0.5	0.15	
UDA	UDA-UE Comp Shad	1,2,3,4,7,8-HxCDF	pg/g	0.85	J	0.1	0.085	
UDA	UDA-UE Comp Shad	1,2,3,6,7,8-HxCDD	pg/g	1.8	J	0.01	0.018	
UDA	UDA-UE Comp Shad	1,2,3,6,7,8-HxCDF	pg/g	0.08	UJ	0.1	0.004	
UDA	UDA-UE Comp Shad	1,2,3,7,8,9-HxCDD	pg/g	1.1	J	0.01	0.011	
UDA	UDA-UE Comp Shad	1,2,3,7,8-PeCDD	pg/g	1	J	1	1	
UDA	UDA-UE Comp Shad	2,3,4,6,7,8-HxCDF	pg/g	0.3	J	0.1	0.03	
UDA	UDA-UE Comp Shad	2,3,4,7,8-PeCDF	pg/g	0.25	J	0.5	0.125	
UDA	UDA-UE Comp Shad	2,3,7,8-TCDD	pg/g	1.1		1	1.1	
UDA	UDA-UE Comp Shad	2,3,7,8-TCDF	pg/g	2.6		0.05	0.13	2.67567

Table 3-22. Summary of concentrations and frequency of detection of COPECs identified in fish tissue.

CAS	Analysis	Analyte	Units	Site (PDA)			Downstream Reference (DDA)			Upstream Reference (UDA)		
				Max. Conc	Avg. Conc	Freq%	Max Conc	Avg Conc	Freq%	Max Conc	Avg Conc	Freq%
95-50-1	SVOCs	1,2-Dichlorobenzene	ug/kg	240	228	44.4%	ND	ND	0.00%	ND	ND	0.0%
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/kg	130	241	11.1%	ND	ND	0.00%	ND	ND	0.0%
120-83-2	SVOCs	2,4-Dichlorophenol	ug/kg	190	227	33.3%	ND	ND	0.00%	ND	ND	0.0%
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/kg	220	222	44.4%	340	317	100.00%	110	207	33.3%
72-54-8	Pesticides	4,4'-DDD	ug/kg	6.70	11	22.2%	12	17	33.33%	ND	ND	0.0%
72-55-9	Pesticides	4,4'-DDE	ug/kg	60	18	88.9%	19	13	100.00%	25	21	66.7%
50-29-3	Pesticides	4,4'-DDT	ug/kg	13	13	11.1%	ND	ND	0.00%	7.60	15	33.3%
319-84-6	Pesticides	alpha-BHC	ug/kg	2.60	11	11.1%	ND	ND	0.00%	ND	ND	0.0%
5103-71-9	Pesticides	alpha-Chlordane	ug/kg	14	12	22.2%	7.7	11	33.33%	ND	ND	0.0%
60-57-1	Pesticides	Dieldrin	ug/kg	64	15	77.8%	19	14	100.00%	32	21	66.7%
959-98-8	Pesticides	Endosulfan I	ug/kg	4.30	12	11.1%	ND	ND	0.00%	3.00	14	33.3%
72-20-8	Pesticides	Endrin	ug/kg	15	12	22.2%	ND	ND	0.00%	ND	ND	0.0%
7421-93-4	Pesticides	Endrin aldehyde	ug/kg	10	12	22.2%	4.9	14	33.33%	7.40	13	66.7%
5103-74-2	Pesticides	gamma-Chlordane	ug/kg	8.10	11	22.2%	3.5	14	33.33%	5.80	14	33.3%
1024-57-3	Pesticides	Heptachlor epoxide	ug/kg	5.30	11	22.2%	ND	ND	0.00%	ND	ND	0.0%
93-76-5	Herbicides	2,4,5-T	ug/kg	13	5.74	33.3%	ND	ND	0.00%	7.10	5.13	33.3%
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/kg	8.70	4.87	55.6%	6.9	4.98	66.67%	7.50	5.27	33.3%
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	ug/kg	8600	2300	33.3%	ND	ND	0.00%	ND	ND	0.0%
	Dioxin	2,3,7,8-TCDD TEQ	pg/g	3.33	1.30		3.20	1.38		2.68	1.59	

Table 5-1. Summary of sediment quality guidelines (benchmarks) for COPECs retained in 2002 sediments.

CAS	Chemical Class	Analyte	Units	Max. Conc	Sed Ontario LEL[a]	Sed Ontario SEL[a]	TEL	PEL	EPA SQC (ug/kg_{oc})[b]	Jones et al (1997) NAWQC-chronic[c]	Jones et al (1997) EqP - SCVs[d]	NOAA ER-L	NOAA ER-M	Other Criterion Value	Source (other)	Retain as COC?
95-50-1	VOCs	1,2-Dichlorobenzene	ug/kg	365							195					**Yes**
78-93-3	VOCs	2-Butanone (MEK)	ug/kg	26							159[e]					No
67-64-1	VOCs	Acetone	ug/kg	290							5.1[e]					**Yes**
71-43-2	VOCs	Benzene	ug/kg	49							94					No
108-90-7	VOCs	Chlorobenzene	ug/kg	11000							242					**Yes**
100-41-4	VOCs	Ethylbenzene	ug/kg	16							53					No
100-42-5	VOCs	Styrene (Monomer)	ug/kg	37										611	Calc based on EqP approach	No
108-88-3	VOCs	Toluene	ug/kg	14							30					No
1330-20-7	VOCs	Xylenes, Total	ug/kg	81							94					No
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg	365	320	8732										**Yes**
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg	365	370	8496										No
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg	365	240	7906										**Yes**
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg	365	170	1888										**Yes**
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg	365	240	7906										**Yes**
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	365			182	2650								**Yes**
218-01-9	SVOCs	Chrysene	ug/kg	360	340	2714										**Yes**
206-44-0	SVOCs	Fluoranthene	ug/kg	360	750	6018										No
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg	385	200	1888										**Yes**
106-47-8	SVOCs	P-Chloroaniline	ug/kg	3000										40	van der Kooij *et al* ., 1991	**Yes**
87-86-5	SVOCs	Pentachlorophenol	ug/kg	19										360[f]	WA No Effects Level (and USEPA National Sed Qual Survey AET-low value)	No
85-01-8	SVOCs	Phenanthrene	ug/kg	365	560	5605										No
72-54-8	Pesticides	4,4'-DDD	ug/kg	4.4	8.0	35.4										No
72-55-9	Pesticides	4,4'-DDE	ug/kg	4.9	5.0	112										No
50-29-3	Pesticides	4,4'-DDT	ug/kg	7.7	8.0	419										No
319-85-7	Pesticides	beta-BHC	ug/kg	2.3	5.0	124										No

Table 5-1. Summary of sediment quality guidelines (benchmarks) for COPECs retained in 2002 sediments.

CAS	Chemical Class	Analyte	Units	Max. Conc	Sed Ontario LEL[a]	Sed Ontario SEL[a]	TEL	PEL	EPA SQC (ug/kg_{oc})[b]	Jones et al (1997) NAWQC-chronic[c]	Jones et al (1997) EqP - SCVs[d]	NOAA ER-L	NOAA ER-M	Other Criterion Value	Source (other)	Retain as COC?
60-57-1	Pesticides	Dieldrin	ug/kg	4.4	2.0	537										**Yes**
7421-93-4	Pesticides	Endrin Aldehyde	ug/kg	4.4	3.0	767										**Yes**
53494-70-5	Pesticides	Endrin Ketone	ug/kg	4.4	3.0	767										**Yes**
5103-74-2	Pesticides	gamma-Chlordane	ug/kg	3.0	7.0	35.4										No
76-44-8	Pesticides	Heptachlor	ug/kg	2.3	5.0	29.5										No
1024-57-3	Pesticides	Heptachlor Epoxide	ug/kg	11	5.0	29.5										**Yes**
72-43-5	Pesticides	Methoxychlor	ug/kg	40							11					**Yes**
94-75-7	Herbicides	2,4-D	ug/kg	20										35	van der Kooij *et al* ., 1991	No
75-99-0	Herbicides	Dalapon	ug/kg	2200											No Benchmark Available	**Yes**
120-36-5	Herbicides	Dichloroprop	ug/kg	115											No Benchmark Available	**Yes**
93-65-2	Herbicides	MCPP	ug/kg	2500											No Benchmark Available	**Yes**
	PCBs	Total PCB Homologs	ug/kg	69	70	3127										No
	Dioxins	2,3,7,8-TCDD TEQ	ug/kg	0.00037			0.00085	0.022								No
7429-90-5	Metals	Aluminum	mg/kg	12000										73160, 58030[g]	EPA (1996) ARCS Probable Effects Conc (PEC) and No Effect Conc (NEC), respectively	No
7440-38-2	Metals	Arsenic	mg/kg	7.5	6.0	33										**Yes**
7440-39-3	Metals	Barium	mg/kg	300										48	Based on AET (NOAA SQUIRT tables, 1999)	**Yes**
7440-41-7	Metals	Beryllium	mg/kg	0.65										4.0	Based on Kd	No
7440-43-9	Metals	Cadmium	mg/kg	2.0	0.60	10										**Yes**
7440-70-2	Metals	Calcium	mg/kg	18000											No Benchmark Available - Essential Nutrient	No

Table 5-1. Summary of sediment quality guidelines (benchmarks) for COPECs retained in 2002 sediments.

CAS	Chemical Class	Analyte	Units	Max. Conc	Sed Ontario LEL[a]	Sed Ontario SEL[a]	TEL	PEL	EPA SQC (ug/kg_{oc})[b]	Jones et al (1997) NAWQC-chronic[c]	Jones et al (1997) EqP - SCVs[d]	NOAA ER-L	NOAA ER-M	Other Criterion Value	Source (other)	Retain as COC?
7440-47-3	Metals	Chromium	mg/kg	19	26	110										No
7440-48-4	Metals	Cobalt	mg/kg	10	50	50										No
7440-50-8	Metals	Copper	mg/kg	22	16	110										**Yes**
7439-89-6	Metals	Iron	mg/kg	20000	200000	400000										No
7439-92-1	Metals	Lead	mg/kg	47	31	250										**Yes**
7439-95-4	Metals	Magnesium	mg/kg	6400											No Benchmark Available - Essential Nutrient	No
7439-96-5	Metals	Manganese	mg/kg	1000	460	1100										**Yes**
7440-02-0	Metals	Nickel	mg/kg	21	16	75										**Yes**
7440-09-7	Metals	Potassium	mg/kg	1800											No Benchmark Available - Essential Nutrient	No
7440-23-5	Metals	Sodium	mg/kg	290											No Benchmark Available - Essential Nutrient	No
7440-62-2	Metals	Vanadium	mg/kg	29											No Benchmark Available	**Yes**
7440-66-6	Metals	Zinc	mg/kg	540	120	820										**Yes**

[a] LEL and SEL Values are after Persaud et al (1993); the site average TOC was calculated as 0.59% (foc = 0.0059) and SEL values were adjusted for TOC for non-polar compounds, SVOCs, pesticides, and PCBs (by multiplying with a factor of 0.0059)

[b] EPA SQC (Sediment Quality Criteria) values are from USEPA 1997 (EPA 823-R-97-006); the values given in EPA's table were for a TOC of 1% (foc = 0.01); a correction factor of 0.59 was used to correct for site-specific TOC of 0.59%

[c] Jones *et al* ., 1997 - NAWQC: This is a EqP based approach, and secondary chronic values that exceed the benchmarks that used the NAWQC should be COCs.

[d] Jones *et al.* , 1997 - Secondary Chronic Value (SCV). (Note: SCVs were multiplied by the site-specific organic carbon fraction.)

[e] For 2-Butanone and Acetone, polar non-ionic compounds, the EqP model (Jones SCV) provides a conservative estimate of exposure.

[f] WA No Effects Level: Sediment Quality Chemical Criteria, Washington State Dept of Ecology, Sediment Management. WAC 172-204-320.

[g] NEC: Probable Effect Concentration (US EPA 1996, Calculation and evaluation of sediment effect concentrations for the Amphipod Hyalella Azteca and the Midge Chironomous riparius, EPA 905-R96-008, Great Lakes National Program Office, Chicago, IL.

Table 5-2. Summary of sediment quality guidelines (benchmarks) for COPECs retained in 2005 sediments.

CAS	Chemical Class	Analyte	Units	Max. Conc	Sed Ontario LEL[a]	Sed Ontario SEL[a]	TEL	PEL	EPA SQC (ug/kg_{oc})[b]	Jones et al (1997) NAWQC-chronic[c]	Jones et al (1997) EqP SCVs[d]	NOAA ER-L	NOAA ER-M	Other Criterion Value	Source (other)	Retain as COC?
106-46-7	VOCs	1,4-Dichlorobenzene	ug/kg	650										31[e]	WA No Effects Level	**Yes**
71-43-2	VOCs	Benzene	ug/kg	5.5							94					No
108-90-7	VOCs	Chlorobenzene	ug/kg	450							242					**Yes**
100-41-4	VOCs	Ethylbenzene	ug/kg	3.8							53					No
108-88-3	VOCs	Toluene	ug/kg	8.5							30					No
1330-20-7	VOCs	Xylenes, Total	ug/kg	15							94					No
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	360			182	2650								**Yes**
129-00-0	SVOCs	Pyrene	ug/kg	355	490	5015										No
72-54-8	Pesticides	4,4'-DDD	ug/kg	37	8.0	35.4										**Yes**
94-75-7	Herbicides	2,4-D	ug/kg	120										35	van der Kooij *et al*., 1991	**Yes**
120-36-5	Herbicides	Dichloroprop	ug/kg	60											No Benchmark Available	**Yes**
7429-90-5	Metals	Aluminum	mg/kg	12000										73160, 58030[f]	EPA (1996) ARCS Probable Effects Conc (PEC) and No Effect Conc (NEC), respectively	No
7440-38-2	Metals	Arsenic	mg/kg	6.7	6.0	33										**Yes**
7440-39-3	Metals	Barium	mg/kg	180										48	Based on AET (NOAA SQUIRT tables, 1999)	**Yes**
7440-41-7	Metals	Beryllium	mg/kg	0.65										4.0	Based on Kd	No
7440-43-9	Metals	Cadmium	mg/kg	1.7	0.60	10										**Yes**
7440-70-2	Metals	Calcium	mg/kg	11000											No Benchmark Available - Essential Nutrient	No
7440-47-3	Metals	Chromium	mg/kg	17	26	110										No
7440-48-4	Metals	Cobalt	mg/kg	7.7	50	50										No
7440-50-8	Metals	Copper	mg/kg	18	16	110										**Yes**
7439-89-6	Metals	Iron	mg/kg	17000	200000	400000										No

Table 5-2. Summary of sediment quality guidelines (benchmarks) for COPECs retained in 2005 sediments.

CAS	Chemical Class	Analyte	Units	Max. Conc	Sed Ontario LEL[a]	Sed Ontario SEL[a]	TEL	PEL	EPA SQC (ug/kg_{oc})[b]	Jones et al (1997) NAWQC-chronic[c]	Jones et al (1997) EqP - SCVs[d]	NOAA ER-L	NOAA ER-M	Other Criterion Value	Source (other)	Retain as COC?
7439-92-1	Metals	Lead	mg/kg	29	31	250										No
7439-95-4	Metals	Magnesium	mg/kg	4200											No Benchmark Available - Essential Nutrient	No
7439-96-5	Metals	Manganese	mg/kg	770	460	1100										**Yes**
7440-02-0	Metals	Nickel	mg/kg	19	16	75										**Yes**
7440-09-7	Metals	Potassium	mg/kg	1800											No Benchmark Available - Essential Nutrient	No
7440-62-2	Metals	Vanadium	mg/kg	29											No Benchmark Available	**Yes**
7440-66-6	Metals	Zinc	mg/kg	540	120	820										**Yes**

[a] LEL and SEL Values are after Persaud et al (1993); the site average TOC was calculated as 0.59% (foc = 0.0059) and SEL values were adjusted for TOC for non-polar compounds, SVOCs, pesticides, and PCBs (by multiplying with a factor of 0.0059)

[b] EPA SQC (Sediment Quality Criteria) values are from USEPA 1997 (EPA 823-R-97-006); the values given in EPA's table were for a TOC of 1% (foc = 0.01); a correction factor of 0.59 was used to correct for site-specific TOC of 0.59%

[c] Jones *et al*., 1997 - NAWQC: This is a EqP based approach, and secondary chronic values that exceed the benchmarks that used the NAWQC should be COCs.

[d] Jones *et al.*, 1997 - Secondary Chronic Value (SCV). (Note: SCVs were multiplied by the site-specific organic carbon fraction.)

[e] WA No Effects Level: Sediment Quality Chemical Criteria, Washington State Dept of Ecology, Sediment Management. WAC 172-204-320.

[f] NEC: Probable Effect Concentration (US EPA 1996, Calculation and evaluation of sediment effect concentrations for the Amphipod Hyalella Azteca and the Midge Chironomous riparius, EPA 905-R96-008, Great Lakes National Program Office, Chicago, IL.

Table 5-3. Summary of sediment quality guidelines (benchmarks) for COPECs retained in 2007 sediments.

CAS	Chemical Class	Analyte	Units	Max. Conc	Sed Ontario LEL[a]	Sed Ontario SEL[a]	TEL	PEL	EPA SQC (ug/kg_{oc})[b]	Jones et al (1997) NAWQC-chronic[c]	Jones et al (1997) EqP SCVs[d]	NOAA ER-L	NOAA ER-M	Other Criterion Value	Source (other)	Retain as COC?
106-46-7	VOCs	1,4-Dichlorobenzene	ug/kg	1200										31[f]	WA No Effects Level	**Yes**
78-93-3	VOCs	2-Butanone (MEK)	ug/kg	46							159[e]					No
67-64-1	VOCs	Acetone	ug/kg	300							5.1[e]					**Yes**
71-43-2	VOCs	Benzene	ug/kg	27							94					No
75-15-0	VOCs	Carbon Disulfide	ug/kg	20										23.9	EPA Region 5 ESL	No
108-90-7	VOCs	Chlorobenzene	ug/kg	19000							242					**Yes**
100-41-4	VOCs	Ethylbenzene	ug/kg	8.4							53					No
108-88-3	VOCs	Toluene	ug/kg	200							30					**Yes**
1330-20-7	VOCs	Xylenes, Total	ug/kg	18							94					No
83-32-9	SVOCs	Acenaphthene	ug/kg	290	16	500										**Yes**
132-64-9	SVOCs	Dibenzofuran	ug/kg	290										449	EPA Region 5 ESL	No
84-66-2	SVOCs	Diethyl Phthalate	ug/kg	290										295	EPA Region 5 ESL	No
206-44-0	SVOCs	Fluoranthene	ug/kg	260	750	6018										No
86-73-7	SVOCs	Fluorene	ug/kg	290	190	944										**Yes**
106-47-8	SVOCs	P-Chloroaniline	ug/kg	1900										40	van der Kooij *et al*., 1991	**Yes**
72-54-8	Pesticides	4,4'-DDD	ug/kg	8.8	8.0	35.4										**Yes**
120-36-5	Herbicides	Dichloroprop	ug/kg	56											No Benchmark Available	**Yes**
7429-90-5	Metals	Aluminum	mg/kg	8700										73160, 58030[g]	EPA (1996) ARCS Probable Effects Conc (PEC) and No Effect Conc (NEC), respectively	No
7440-39-3	Metals	Barium	mg/kg	160										48	Based on AET (NOAA SQUIRT tables, 1999)	**Yes**
7440-41-7	Metals	Beryllium	mg/kg	0.50										4.0	Based on Kd	No
7440-43-9	Metals	Cadmium	mg/kg	2.0	0.60	10										**Yes**
7440-70-2	Metals	Calcium	mg/kg	14000											No Benchmark Available - Essential Nutrient	No

Table 5-3. Summary of sediment quality guidelines (benchmarks) for COPECs retained in 2007 sediments.

CAS	Chemical Class	Analyte	Units	Max. Conc	Sed Ontario LEL[a]	Sed Ontario SEL[a]	TEL	PEL	EPA SQC (ug/kg_{oc})[b]	Jones et al (1997) NAWQC-chronic[c]	Jones et al (1997) EqP SCVs[d]	NOAA ER-L	NOAA ER-M	Other Criterion Value	Source (other)	Retain as COC?
7440-47-3	Metals	Chromium	mg/kg	17	26	110										No
7440-48-4	Metals	Cobalt	mg/kg	6.3	50	50										No
7440-50-8	Metals	Copper	mg/kg	22	16	110										**Yes**
7439-89-6	Metals	Iron	mg/kg	15000	200000	400000										No
7439-92-1	Metals	Lead	mg/kg	27	31	250										No
7439-95-4	Metals	Magnesium	mg/kg	4100											No Benchmark Available - Essential Nutrient	No
7440-02-0	Metals	Nickel	mg/kg	16	16	75										**Yes**
7440-09-7	Metals	Potassium	mg/kg	1500											No Benchmark Available - Essential Nutrient	No
7440-62-2	Metals	Vanadium	mg/kg	26											No Benchmark Available	**Yes**
7440-66-6	Metals	Zinc	mg/kg	370	120	820										**Yes**

[a] LEL and SEL Values are after Persaud et al (1993); the site average TOC was calculated as 0.59% (foc = 0.0059) and SEL values were adjusted for TOC for non-polar compounds, SVOCs, pesticides, and PCBs (by multiplying with a factor of 0.0059)

[b] EPA SQC (Sediment Quality Criteria) values are from USEPA 1997 (EPA 823-R-97-006); the values given in EPA's table were for a TOC of 1% (foc = 0.01); a correction factor of 0.59 was used to correct for site-specific TOC of 0.59%

[c] Jones *et al*., 1997 - NAWQC: This is a EqP based approach, and secondary chronic values that exceed the benchmarks that used the NAWQC should be COCs.

[d] Jones *et al.*, 1997 - Secondary Chronic Value (SCV). (Note: SCVs were multiplied by the site-specific organic carbon fraction.)

[e] For 2-Butanone and Acetone, polar non-ionic compounds, the EqP model (Jones SCV) provides a conservative estimate of exposure.

[f] WA No Effects Level: Sediment Quality Chemical Criteria, Washington State Dept of Ecology, Sediment Management. WAC 172-204-320.

[g] NEC: Probable Effect Concentration (US EPA 1996, Calculation and evaluation of sediment effect concentrations for the Amphipod Hyalella Azteca and the Midge Chironomous riparius, EPA 905-R96-008, Great Lakes National Program Office, Chicago, IL.

Table 5-4. Summary of water quality guidelines (benchmarks) used for screening of COPECs retained in 2002 surface water.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Site Max. Conc	NAWQC - Acute[a]	NAWQC - Chronic[b]	IL -Acute Aquatic Toxicity Criterion	IL-Chronic Aquatic Toxicity Criterion	SW Tier II Secondary Acute	SW Tier II Secondary Chronic	Oak Ridge Lowest Chronic Value for Fish[c]	Other Criterion	Retain as COC?
95-50-1	VOCs	T	1,2-Dichlorobenzene	ug/l	40			170	210					No
107-06-2	VOCs	T	1,2-Dichloroethane	ug/l	0.70			25000	4500					No
71-43-2	VOCs	T	Benzene	ug/l	4.5			4200	860					No
75-15-0	VOCs	T	Carbon Disulfide	ug/l	0.69			200	20					No
108-90-7	VOCs	T	Chlorobenzene	ug/l	56			990000	79000					No
74-87-3	VOCs	T	Chloromethane	ug/l	0.96			16000[g]	1300[g]					No
108-88-3	VOCs	T	Toluene	ug/l	4.5			2000	600					No
1330-20-7	VOCs	T	Xylenes, Total	ug/l	3.0			920	360					No
120-83-2	SVOCs	T	2,4-Dichlorophenol	ug/l	69			630	83					No
95-57-8	SVOCs	T	2-Chlorophenol	ug/l	31	4380[d]		510	41					No
106-44-5	SVOCs	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	27			670[h]	120[h]					No
106-47-8	SVOCs	T	p-Chloroaniline	ug/l	160			2.4	0.20[g]					**Yes**
108-95-2	SVOCs	T	Phenol	ug/l	14	3600[e]	110[e]							No
94-75-7	Herbicides	T	2,4-D	ug/l	29			100	8.0					**Yes**
7429-90-5	Metals	T	Aluminum	mg/l	1.1	0.75	0.087					3.3		**Yes**
7440-38-2	Metals	T	Arsenic	mg/l	0.0061	0.34	0.15							No
7440-39-3	Metals	D	Barium	mg/l	0.054					0.11	0.0040			**Yes**
7440-39-3	Metals	T	Barium	mg/l	0.065					0.11	0.0040			**Yes**
7440-70-2	Metals	D	Calcium	mg/l	53							116	Essential Nutrient	No
7440-70-2	Metals	T	Calcium	mg/l	54							116	Essential Nutrient	No
7440-48-4	Metals	T	Cobalt	mg/l	0.010					1.5	0.023			No
7440-50-8	Metals	T	Copper	mg/l	0.039	0.032	0.020							**Yes**
7439-89-6	Metals	D	Iron	mg/l	0.087		1						Essential Nutrient	No
7439-89-6	Metals	T	Iron	mg/l	1.4		1[f]						Essential Nutrient	No
7439-92-1	Metals	T	Lead	mg/l	0.0049	0.36	0.24							No
7439-95-4	Metals	D	Magnesium	mg/l	22							82	Essential Nutrient	No
7439-95-4	Metals	T	Magnesium	mg/l	22							82	Essential Nutrient	No
7439-96-5	Metals	T	Manganese	mg/l	0.14					2.3	0.12			**Yes**
7439-97-6	Metals	D	Mercury	mg/l	0.00012	0.0014	0.00077							No
7439-97-6	Metals	T	Mercury	mg/l	0.00020	0.0016	0.0014							No

Table 5-4. Summary of water quality guidelines (benchmarks) used for screening of COPECs retained in 2002 surface water.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Site Max. Conc	NAWQC - Acute[a]	NAWQC - Chronic[b]	IL -Acute Aquatic Toxicity Criterion	IL-Chronic Aquatic Toxicity Criterion	SW Tier II Secondary Acute	SW Tier II Secondary Chronic	Oak Ridge Lowest Chronic Value for Fish[c]	Other Criterion	Retain as COC?
7440-09-7	Metals	D	Potassium	mg/l	3.6							53	Essential Nutrient	No
7440-09-7	Metals	T	Potassium	mg/l	3.7							53	Essential Nutrient	No
7440-23-5	Metals	D	Sodium	mg/l	24							680	Essential Nutrient	No
7440-23-5	Metals	T	Sodium	mg/l	24							680	Essential Nutrient	No
7440-62-2	Metals	D	Vanadium	mg/l	0.010					0.28	0.0020			**Yes**
7440-66-6	Metals	D	Zinc	mg/l	0.036	0.24	0.24							No
7440-66-6	Metals	T	Zinc	mg/l	0.041	0.25	0.25							No

[a] NAQWC Acute Criterion is the same as Criteria Maximum Concentration (CMC)

[b] NAQWC Chronic Criterion is the same as Criteria Continuous Concentration (CCC)

[c] For calcium, magnesium, potassium and sodium, the LCV for all organisms were used; the aluminum LCV is for fish.

[d] NOAA Screening Quick Reference Table (SQuiRT), September 1999. Values are for Lowest Observable Effect Level

[e] EPA. 1993d. Great Lakes Water Quality Initiative Criteria documents for the protection of aquatic life in ambient water (February 1993 Draft). PB93-154656. National Technical Information Service. Springfield, VA. (As cited in Suter and Tsao, 1996)

[f] Value for total iron used for dissolved iron

[g] These IL water quality standards were calculated with insufficient data, and recommends that these values should be used for advisory purposes only such as establishing "reasonable potential"

[h] Based on the more conservative values for 4-methylphenol

Table 5-5. Summary of water quality guidelines (benchmarks) used for screening of COPECs retained in 2005 surface water.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Site Max. Conc	NAWQC - Acute[a]	NAWQC - Chronic[b]	IL -Acute Aquatic Toxicity Criterion	IL-Chronic Aquatic Toxicity Criterion	SW Tier II Secondary Acute	SW Tier II Secondary Chronic	Oak Ridge Lowest Chronic Value for Fish[c]	Other Criterion Value	Source (other)	Retain as COC?
108-90-7	VOCs	T	Chlorobenzene	ug/l	4.3			990000	79000						No
94-75-7	Herbicides	T	2,4-D	ug/l	1.2			100	8.0						No
7429-90-5	Metals	T	Aluminum	mg/l	3.8	0.75	0.087					3.3			**Yes**
7440-38-2	Metals	T	Arsenic	mg/l	0.0066	0.34	0.15								No
7440-39-3	Metals	D	Barium	mg/l	0.076					0.11	0.0040				**Yes**
7440-39-3	Metals	T	Barium	mg/l	0.12					0.11	0.0040				**Yes**
7439-89-6	Metals	T	Iron	mg/l	3.5		1[d]						Essential Nutrient		No
7439-92-1	Metals	D	Lead	mg/l	0.0027	0.24	0.0093								No
7439-92-1	Metals	T	Lead	mg/l	0.0047	0.36	0.24								No
7439-95-4	Metals	D	Magnesium	mg/l	22							82	Essential Nutrient		No
7439-95-4	Metals	T	Magnesium	mg/l	22							82	Essential Nutrient		No
7439-96-5	Metals	T	Manganese	mg/l	0.25					2.3	0.12				**Yes**
7440-09-7	Metals	D	Potassium	mg/l	4.9							53	Essential Nutrient		No
7440-09-7	Metals	T	Potassium	mg/l	5.5							53	Essential Nutrient		No
7782-49-2	Metals	D	Selenium	mg/l	0.0075								0.0050	EPA Region 5 ESL	**Yes**
7440-23-5	Metals	D	Sodium	mg/l	34							680	Essential Nutrient		No
7440-23-5	Metals	T	Sodium	mg/l	35							680	Essential Nutrient		No
7440-28-0	Metals	T	Thallium	mg/l	0.013					0.11	0.012				**Yes**
7440-62-2	Metals	T	Vanadium	mg/l	0.011					0.28	0.0020				**Yes**
7440-66-6	Metals	T	Zinc	mg/l	0.065	0.25	0.25								No

[a] NAQWC Acute Criterion is the same as Criteria Maximum Concentration (CMC)

[b] NAQWC Chronic Criterion is the same as Criteria Continuous Concentration (CCC)

[c] For magnesium, potassium and sodium, the LCV for all organisms were used; the aluminum LCV is for fish.

[d] Value for total iron used for dissolved iron

Table 5-6. Summary of water quality guidelines (benchmarks) used for screening of COPECs retained in 2007 surface water.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Site Max. Conc	NAWQC - Acute[a]	NAWQC - Chronic[b]	IL -Acute Aquatic Toxicity Criterion	IL-Chronic Aquatic Toxicity Criterion	SW Tier II Secondary Acute	SW Tier II Secondary Chronic	Oak Ridge Lowest Chronic Value for Fish[c]	Other Criterion	Retain as COC?
7440-39-3	Metals	D	Barium	mg/l	0.066					0.11	0.0040			**Yes**
7440-70-2	Metals	D	Calcium	mg/l	59							116	Essential Nutrient	No
7439-89-6	Metals	D	Iron	mg/l	0.092		1						Essential Nutrient	No
7439-95-4	Metals	D	Magnesium	mg/l	21							82	Essential Nutrient	No
7440-09-7	Metals	D	Potassium	mg/l	4.6							53	Essential Nutrient	No
7440-23-5	Metals	D	Sodium	mg/l	34							680	Essential Nutrient	No

[a] NAQWC Acute Criterion is the same as Criteria Maximum Concentration (CMC)

[b] NAQWC Chronic Criterion is the same as Criteria Continuous Concentration (CCC)

[c] For calcium, magnesium, potassium and sodium, the LCV for all organisms were used

Table 5-7. Calculation of site-specific NAWQC for hardness-dependent metals in surface water and total to dissolved criterion conversions.

METAL	HARDNESS CALCULATIONS[1] *For Filtered Freshwater Criteria*		UNFILTERED TO FILTERED CALCULATIONS[1] *Conversion Factors*	
	CMC	**CCC**	**CMC**	**CCC**
Arsenic (As)			CF = 1	CF = 1
Copper (Cu)	$CMC = e^{0.9422\ [In\ (hardness)]\ -1.7}$	$CCC = e^{0.8545\ [In\ (hardness)]\ -1.702}$	CF = 0.960	CF = 0.960
Lead (Pb)	$CMC = e^{1.273\ [In\ (hardness)]\ -1.46}$	$CCC = e^{1.273\ [In\ (hardness)]\ -4.705}$	CF = 1.46203 – 0.145712[*In hardness)*]	Same as CMC
Mercury (Hg)			CF = 0.85	Same as CMC
Zinc (Zn)	$CMC = e^{0.8473\ [In\ (hardness)]\ + 0.884}$	$CCC = e^{0.8473\ [In\ (hardness)]\ + 0.884}$	CF = 0.978	CF = 0.986

[1]Adopted from the NAWQC document (USEPA, 2002).

Table 5-8. Toxicity reference values (TRVs) and Hazard Quotients (HQs) for COPECs identified in fish.

Analyte	CAS	TRV (mg/kg)	Site Max Fish Conc (mg/kg)	Ref. Area Max Conc (mg/kg)	Site HQ_{max}	Ref. Area HQ_{max}
SVOCs						
1,2-dichlorobenzene	95-50-1	0.70	0.24	ND	0.34	
1,4-dichlorobenzene	106-46-7	0.61	0.13	ND	0.21	
2,4-Dichlorophenol	120-83-2	134.16	0.19	ND	0.001	
2-Methylphenol	95-48-7	1.00	0.22	0.34	0.22	0.34
Pesticides						
4,4'-DDD	72-54-8	0.060	0.0067	0.012	0.11	0.20
4,4`-DDE	72-55-9	1.61	0.060	0.025	0.04	0.02
4,4`-DDT	50-29-3	3.90	0.013	0.0076	0.0033	0.0020
Alpha-BHC	319-84-6	22.5	0.0026	ND	0.0001	
Alpha-Chlordane	57-74-9	1.66	0.014	0.0077	0.008	0.005
Dieldrin	60-57-1	0.37	0.064	0.032	0.17	0.09
Endosulfan I	115-29-7	0.20	0.0043	0.003	0.02	0.02
Endrin	72-20-8	0.16	0.015	ND	0.09	
Endrin Aldehyde	72-20-8	0.16	0.010	0.0074	0.06	0.05
Gamma-Chlordane	57-74-9	1.66	0.0081	0.0058	0.005	0.003
Heptachlor epoxide	1024-57-3	3.20	0.0053	ND	0.002	
Herbicides						
2,4,5-T	94-75-7	0.30	0.013	0.0071	0.04	0.02
2,4,5-TP (Silvex)	93-72-1	0.51	0.0087	0.0075	0.02	0.01
MCPP	7085-19-0	5.74	8.6	ND	1.50	
Dioxins/Furans						
2,3,7,8-TCDD (TEQ)		2.69E-03	3.33E-06	3.20E-06	0.0012	0.0012
1,2,3,4,6,7,8,9-OCDF	39001-02-0	1.41E-02	4.30E-06	2.70E-06	0.0003	0.0002
1,2,3,4,6,7,8-HCDD	35822-46-9	1.90E-02	7.10E-06	8.80E-06	0.0004	0.0005
1,2,3,4,7,8-HCDD	39227-28-6	3.90E-06	3.00E-07	5.80E-07	0.08	0.15
1,2,3,4,7,8-HxCDF	70648-26-9	9.90E-06	8.40E-07	8.50E-07	0.08	0.09
1,2,3,6,7,8-HxCDD	57653-85-7	1.00E-02	1.20E-06	2.00E-06	0.0001	0.0002
1,2,3,7,8-PcCDD	40321-76-4	5.66E-06	6.40E-07	1.20E-06	0.11	0.21
1,2,3,7,8-PeCDF	57117-41-6	7.34E-05	4.30E-07	ND	0.01	
2,3,4,7,8-PCDF	57117-31-4	1.02E-04	6.40E-07	1.00E-06	0.01	0.01
2,3,7,8-TCDF	51207-31-9	4.74E-04	5.70E-06	2.60E-06	0.01	0.01
2,3,7,8-TCDD	1746-01-6	2.69E-03	2.40E-06	1.10E-06	0.0009	0.0004

Table 7-1. Calculation of Hazard Quotiens (HQs) for COPECs identified in 2002 sediments.

CAS	Chemical Class	Analyte	Units	Site Max. Conc	Site Mean Conc H-UCL(95)	Ref Max Conc	Benchmark Value	Site HQ_{max}	Site HQ_{mean}	Site Max. Conc Based on a Detected Conc[a]	Site HQ_{max} Detected Conc.	Reference HQ_{max}
95-50-1	VOCs	1,2-Dichlorobenzene	ug/kg	365	237	250	195	1.9	1.2	330	1.7	1.3
78-93-3	VOCs	2-Butanone (MEK)	ug/kg	26	8.9	8.5	159	0.16	0.056	7.5	0.047	0.053
67-64-1	VOCs	Acetone	ug/kg	290	42	98	5.1	57	8.2			19
71-43-2	VOCs	Benzene	ug/kg	49	6.8	1.7	94	0.52	0.072			0.018
108-90-7	VOCs	Chlorobenzene	ug/kg	11000	1075	1.7	242	45	4.4			0.0070
100-41-4	VOCs	Ethylbenzene	ug/kg	16	3.5	1.7	53	0.30	0.066			0.032
100-42-5	VOCs	Styrene (Monomer)	ug/kg	37	4.6	1.7	611	0.061	0.0075			0.0028
108-88-3	VOCs	Toluene	ug/kg	14	3.5	1.7	30	0.47	0.12			0.058
1330-20-7	VOCs	Xylenes, Total	ug/kg	81	17	5.5	94	0.86	0.18			0.058
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg	365	235	250	320	1.1	0.73	91	0.28	0.78
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg	365	224	250	370	0.99	0.61	72	0.19	0.68
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg	365	235	250	240	1.5	0.98	75	0.31	1.0
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg	365	224	250	170	2.1	1.3	79	0.46	1.5
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg	365	222	250	240	1.5	0.92	83	0.35	1.0
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	365	221	250	182	2.0	1.2	88	0.48	1.4
218-01-9	SVOCs	Chrysene	ug/kg	360	207	220	340	1.1	0.61	92	0.27	0.65
206-44-0	SVOCs	Fluoranthene	ug/kg	360	220	220	750	0.48	0.29	160	0.21	0.29
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg	385	244	250	200	1.9	1.2	29	0.15	1.3
106-47-8	SVOCs	p-Chloroaniline	ug/kg	3000	708	500	40	75	18			13
87-86-5	SVOCs	Pentachlorophenol	ug/kg	19	12		360	0.053	0.032	3.6	0.010	
85-01-8	SVOCs	Phenanthrene	ug/kg	365	232	220	560	0.65	0.41	72	0.13	0.39
72-54-8	Pesticides	4,4'-DDD	ug/kg	4.4	2.7	2.5	8.0	0.55	0.34	1.2	0.15	0.31
72-55-9	Pesticides	4,4'-DDE	ug/kg	4.9	2.3	2.2	5.0	0.98	0.46			0.44
50-29-3	Pesticides	4,4'-DDT	ug/kg	7.7	3.1	2.2	8.0	0.96	0.38	3.3	0.41	0.28
319-85-7	Pesticides	beta-BHC	ug/kg	2.3	1.3	1.3	5.0	0.46	0.27	0.67	0.13	0.26
60-57-1	Pesticides	Dieldrin	ug/kg	4.4	2.6	2.5	2.0	2.2	1.3	2.9	1.5	1.3
7421-93-4	Pesticides	Endrin Aldehyde	ug/kg	4.4	2.7	2.5	3.0	1.5	0.89	4.1	1.4	0.83
53494-70-5	Pesticides	Endrin Ketone	ug/kg	4.4	2.3	2.5	3.0	1.5	0.77	1.3	0.43	0.83
5103-74-2	Pesticides	gamma-Chlordane	ug/kg	3.0	1.3	1.3	7.0	0.43	0.19			0.19
76-44-8	Pesticides	Heptachlor	ug/kg	2.3	1.3	1.3	5.0	0.46	0.26	0.98	0.20	0.26
1024-57-3	Pesticides	Heptachlor Epoxide	ug/kg	11	2.0	1.3	5.0	2.2	0.40			0.26
72-43-5	Pesticides	Methoxychlor	ug/kg	40	15	13	11	3.6	1.3	3.3	0.29	1.2
94-75-7	Herbicides	2,4-D	ug/kg	20	8.3	5.2	35	0.57	0.24			0.15
75-99-0	Herbicides	Dalapon	ug/kg	2200	1469		NA	NA	NA	9.9	NA	NA
120-36-5	Herbicides	Dichloroprop	ug/kg	115	73	23	NA	NA	NA	6.8	NA	NA
93-65-2	Herbicides	MCPP	ug/kg	2500	1501	460	NA	NA	NA			NA
	PCBs	Total PCB Homologs	ug/kg	69	50		70	0.99	0.72			
	Dioxins	2,3,7,8-TCDD TEQ	ug/kg	0.00037	0.00024	0.000019	0.00085	0.44	0.29			0.022

Table 7-1. Calculation of Hazard Quotiens (HQs) for COPECs identified in 2002 sediments.

CAS	Chemical Class	Analyte	Units	Site Max. Conc	Site Mean Conc H-UCL(95)	Ref Max Conc	Benchmark Value	Site HQ_{max}	Site HQ_{mean}	Site Max. Conc Based on a Detected Conc[a]	Site HQ_{max} Detected Conc.	Reference HQ_{max}
7429-90-5	Metals	Aluminum	mg/kg	12000	3579	5900	58030	0.21	0.062			0.10
7440-38-2	Metals	Arsenic	mg/kg	7.5	3.4	5.6	6.0	1.3	0.57			0.93
7440-39-3	Metals	Barium	mg/kg	300	107	140	48	6.3	2.2			2.9
7440-41-7	Metals	Beryllium	mg/kg	0.65	0.29	0.48	4.0	0.16	0.072			0.12
7440-43-9	Metals	Cadmium	mg/kg	2.0	0.58	1.2	0.60	3.3	0.97			2.0
7440-70-2	Metals	Calcium	mg/kg	18000	7324	8200	NA	NA	NA			NA
7440-47-3	Metals	Chromium	mg/kg	19	8.1	11	26	0.73	0.31			0.42
7440-48-4	Metals	Cobalt	mg/kg	10	4.6	6.0	50	0.20	0.092			0.12
7440-50-8	Metals	Copper	mg/kg	22	7.6	12	16	1.4	0.48			0.75
7439-89-6	Metals	Iron	mg/kg	20000	9500	12000	200000	0.10	0.048			0.060
7439-92-1	Metals	Lead	mg/kg	47	21	12	31	1.5	0.66			0.39
7439-95-4	Metals	Magnesium	mg/kg	6400	2645	3400	NA	NA	NA			NA
7439-96-5	Metals	Manganese	mg/kg	1000	350	500	460	2.2	0.76			1.1
7440-02-0	Metals	Nickel	mg/kg	21	10	15	16	1.3	0.63			0.94
7440-09-7	Metals	Potassium	mg/kg	1800	539	820	NA	NA	NA			NA
7440-23-5	Metals	Sodium	mg/kg	290	96	78	NA	NA	NA			NA
7440-62-2	Metals	Vanadium	mg/kg	29	11	19	NA	NA	NA			NA
7440-66-6	Metals	Zinc	mg/kg	540	117	89	120	4.5	0.97			0.74

Note:

[a] - If the max. concentration HQ was above 1.0, then a second calculation was done if the max concentration was based on 1/2 the detection limit for a non-detect sample result. This second calculation was what the final COPECs were based on.

Table 7-2. Calculation of Hazard Quotiens (HQs) for COPECs identified in 2005 sediments.

CAS	Chemical Class	Analyte	Units	Site Max. Conc	Site Mean Conc H-UCL(95)	Ref Max Conc	Benchmark Value	Site HQ_{max}	Site HQ_{mean}	Site Max. Conc Based on a Detected Conc[a]	Site HQ_{max} Detected Conc.	Reference HQ_{max}
106-46-7	VOCs	1,4-Dichlorobenzene	ug/kg	650	323	250	31	21	10			8.1
71-43-2	VOCs	Benzene	ug/kg	5.5	4.0	1.7	94	0.058	0.042	4.9	0.052	0.018
108-90-7	VOCs	Chlorobenzene	ug/kg	450	148	1.7	242	1.9	0.61			0.0070
100-41-4	VOCs	Ethylbenzene	ug/kg	3.8	3.1	1.7	53	0.072	0.059	3.1	0.059	0.032
108-88-3	VOCs	Toluene	ug/kg	8.5	4.8	1.7	30	0.29	0.16			0.058
1330-20-7	VOCs	Xylenes, Total	ug/kg	15	9.0	5.5	94	0.16	0.095	3.6		0.058
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	360	272	250	182	2.0	1.5	55	0.30	1.4
129-00-0	SVOCs	Pyrene	ug/kg	355	241	220	490	0.72	0.49	45	0.092	0.45
72-54-8	Pesticides	4,4'-DDD	ug/kg	37	18	2.5	8.0	4.6	2.2	6.5	0.81	0.31
94-75-7	Herbicides	2,4-D	ug/kg	120	56	5.2	35	3.4	1.6			0.15
120-36-5	Herbicides	Dichloroprop	ug/kg	60	56	23	NA	NA	NA	31	NA	NA
7429-90-5	Metals	Aluminum	mg/kg	12000	6639	5900	58030	0.21	0.11			0.10
7440-38-2	Metals	Arsenic	mg/kg	6.7	4.2	5.6	6.0	1.1	0.70			0.93
7440-39-3	Metals	Barium	mg/kg	180	108	140	48	3.8	2.3			2.9
7440-41-7	Metals	Beryllium	mg/kg	0.65	0.37	0.48	4.0	0.16	0.093			0.12
7440-43-9	Metals	Cadmium	mg/kg	1.7	0.97	1.2	0.60	2.8	1.6			2.0
7440-70-2	Metals	Calcium	mg/kg	11000	6917	8200	NA	NA	NA			NA
7440-47-3	Metals	Chromium	mg/kg	17	10	11	26	0.65	0.40			0.42
7440-48-4	Metals	Cobalt	mg/kg	7.7	5.3	6.0	50	0.15	0.11			0.12
7440-50-8	Metals	Copper	mg/kg	18	11	12	16	1.1	0.71			0.75
7439-89-6	Metals	Iron	mg/kg	17000	10621	12000	200000	0.085	0.053			0.060
7439-92-1	Metals	Lead	mg/kg	29	17	12	31	0.94	0.56			0.39
7439-95-4	Metals	Magnesium	mg/kg	4200	2637	3400	NA	NA	NA			NA
7439-96-5	Metals	Manganese	mg/kg	770	457	500	460	1.7	0.99			1.1
7440-02-0	Metals	Nickel	mg/kg	19	13	15	16	1.2	0.79			0.94
7440-09-7	Metals	Potassium	mg/kg	1800	987	820	NA	NA	NA			NA
7440-62-2	Metals	Vanadium	mg/kg	29	17	19	NA	NA	NA			NA
7440-66-6	Metals	Zinc	mg/kg	540	316	89	120	4.5	2.6			0.74

Note:

[a] - If the max. concentration HQ was above 1.0, then a second calculation was done if the max concentration was based on 1/2 the detection limit for a non-detect sample result. This second calculation was what the final COPECs were based on.

Table 7-3. Calculation of Hazard Quotiens (HQs) for COPECs identified in 2007 sediments.

CAS	Chemical Class	Analyte	Units	Site Max. Conc	Site Mean Conc H-UCL(95)	Ref Max Conc	Benchmark Value	Site HQ_{max}	Site HQ_{mean}	Site Max. Conc Based on a Detected Conc[a]	Site HQ_{max} Detected Conc.	Reference HQ_{max}
106-46-7	VOCs	1,4-Dichlorobenzene	ug/kg	1200	1187	250	31	39	38			8.1
78-93-3	VOCs	2-Butanone (MEK)	ug/kg	46	46	8.5	159	0.29	0.29			0.053
67-64-1	VOCs	Acetone	ug/kg	300	296	98	5.1	59	58			19
71-43-2	VOCs	Benzene	ug/kg	27	27	1.7	94	0.29	0.28			0.018
75-15-0	VOCs	Carbon Disulfide	ug/kg	20	20	1.7	24	0.84	0.83			0.071
108-90-7	VOCs	Chlorobenzene	ug/kg	19000	18746	1.7	242	79	77			0.0070
100-41-4	VOCs	Ethylbenzene	ug/kg	8.4	8.3	1.7	53	0.16	0.16			0.032
108-88-3	VOCs	Toluene	ug/kg	200	197	1.7	30	6.8	6.7			0.058
1330-20-7	VOCs	Xylenes, Total	ug/kg	18	18	5.5	94	0.19	0.19			0.058
83-32-9	SVOCs	Acenaphthene	ug/kg	290	318	250	16	18	20	32	2.0	16
132-64-9	SVOCs	Dibenzofuran	ug/kg	290	319	250	449	0.65	0.71	29	0.065	0.56
84-66-2	SVOCs	Diethyl Phthalate	ug/kg	290	311	250	295	0.98	1.1	65	0.22	0.85
206-44-0	SVOCs	Fluoranthene	ug/kg	260	267	220	750	0.35	0.36			0.29
86-73-7	SVOCs	Fluorene	ug/kg	290	313	250	190	1.5	1.6	49	0.26	1.3
106-47-8	SVOCs	P-Chloroaniline	ug/kg	1900	1880	500	40	48	47			13
72-54-8	Pesticides	4,4'-DDD	ug/kg	8.8	8.7	2.5	8.0	1.1	1.1			0.31
120-36-5	Herbicides	Dichlorprop	ug/kg	56	55	23	NA	NA	NA			NA
7429-90-5	Metals	Aluminum	mg/kg	8700	8597	5900	58030	0.15	0.15			0.10
7440-39-3	Metals	Barium	mg/kg	160	159	140	48	3.3	3.3			2.9
7440-41-7	Metals	Beryllium	mg/kg	0.50	0.49	0.48	4.0	0.12	0.12			0.12
7440-43-9	Metals	Cadmium	mg/kg	2.0	2.0	1.2	0.60	3.3	3.3			2.0
7440-70-2	Metals	Calcium	mg/kg	14000	13848	8200	NA	NA	NA			NA
7440-47-3	Metals	Chromium	mg/kg	17	17	11	26	0.65	0.65			0.42
7440-48-4	Metals	Cobalt	mg/kg	6.3	6.3	6.0	50	0.13	0.13			0.12
7440-50-8	Metals	Copper	mg/kg	22	22	12	16	1.4	1.4			0.75
7439-89-6	Metals	Iron	mg/kg	15000	14858	12000	200000	0.075	0.074			0.060
7439-92-1	Metals	Lead	mg/kg	27	27	12	31	0.87	0.86			0.39
7439-95-4	Metals	Magnesium	mg/kg	4100	4063	3400	NA	NA	NA			NA
7440-02-0	Metals	Nickel	mg/kg	16	16	15	16	1.0	1.0			0.94
7440-09-7	Metals	Potassium	mg/kg	1500	1482	820	NA	NA	NA			NA
7440-62-2	Metals	Vanadium	mg/kg	26	26	19	NA	NA	NA			NA
7440-66-6	Metals	Zinc	mg/kg	370	369	89	120	3.1	3.1			0.74

Note:

[a] - If the max. concentration HQ was above 1.0, then a second calculation was done if the max concentration was based on 1/2 the detection limit for a non-detect sample result. This second calculation was what the final COPECs were based on.

Table 7-4. Calculation of Hazard Quotients (HQs) for COPECs identified in 2002 surface water.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Site Max. Conc	UCL-95 (Average Conc)	Ref Max Conc	Water Quality Guideline	Site		Site Max. Conc Based on a Detected Conc[a]	Site	Reference
									HQ_{max}	HQ_{mean}		HQ_{max} Detected Conc.	HQ_{max}
95-50-1	VOCs	T	1,2-Dichlorobenzene	ug/l	40	7.57	5.0	170	0.24	0.045			0.029
107-06-2	VOCs	T	1,2-Dichloroethane	ug/l	0.70	0.49	0.50	4500	0.00016	0.00011	0.70	0.00016	0.00011
71-43-2	VOCs	T	Benzene	ug/l	4.5	0.75	0.50	860	0.0052	0.00088			0.00058
75-15-0	VOCs	T	Carbon Disulfide	ug/l	0.69	0.51	0.50	20	0.035	0.025			0.025
108-90-7	VOCs	T	Chlorobenzene	ug/l	56	5.9	0.50	79000	0.00071	0.000075			0.0000063
74-87-3	VOCs	T	Chloromethane	ug/l	0.96	0.53	0.50	1300	0.00074	0.00041			0.00038
108-88-3	VOCs	T	Toluene	ug/l	4.5	0.81	0.50	600	0.0075	0.0014			0.00083
1330-20-7	VOCs	T	Xylenes, Total	ug/l	3.0	1.1	1.0	360	0.0083	0.0032			0.0028
120-83-2	SVOCs	T	2,4-Dichlorophenol	ug/l	69	9.2	5.0	83	0.83	0.11			0.060
95-57-8	SVOCs	T	2-Chlorophenol	ug/l	31	6.6	5.0	41	0.76	0.16			0.12
106-44-5	SVOCs	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	27	6.6	5.0	120	0.23	0.055			0.042
106-47-8	SVOCs	T	p-Chloroaniline	ug/l	160	20	10	0.20	800	99			50
108-95-2	SVOCs	T	Phenol	ug/l	14	6.1	5.0	110	0.13	0.056			0.045
94-75-7	Herbicides	T	2,4-D	ug/l	29	3.4	0.25	8.0	3.6	0.43			0.031
7429-90-5	Metals	T	Aluminum	mg/l	1.1	0.8	0.88	0.087	13	9.4			10
7440-38-2	Metals	T	Arsenic	mg/l	0.0061	0.0051	0.0050	0.15	0.041	0.034			0.033
7440-39-3	Metals	D	Barium	mg/l	0.054	0.052	0.051	0.0040	14	13			13
7440-39-3	Metals	T	Barium	mg/l	0.065	0.062	0.061	0.0040	16	15			15
7440-70-2	Metals	D	Calcium	mg/l	53	51	50	116	0.46	0.44			0.43
7440-70-2	Metals	T	Calcium	mg/l	54	52	53	116	0.47	0.45			0.46
7440-48-4	Metals	T	Cobalt	mg/l	0.010	0.0048	0.0050	0.023	0.43	0.21	0.0012	0.052	0.22
7440-50-8	Metals	T	Copper	mg/l	0.039	0.012	0.010	0.020	2.0	0.59			0.50
7439-89-6	Metals	D	Iron	mg/l	0.087	0.044	0.032	1.0	0.087	0.044			0.032
7439-89-6	Metals	T	Iron	mg/l	1.4	1.1	1.1	1.0	1.4	1.1			1.1
7439-92-1	Metals	T	Lead	mg/l	0.0049	0.0028	0.0025	0.24	0.020	0.011			0.010
7439-95-4	Metals	D	Magnesium	mg/l	22	20	20	82	0.27	0.25			0.24
7439-95-4	Metals	T	Magnesium	mg/l	22	21	21	82	0.27	0.25			0.26
7439-96-5	Metals	T	Manganese	mg/l	0.14	0.091	0.084	0.12	1.2	0.76			0.70
7439-97-6	Metals	D	Mercury	mg/l	0.00012	0.00010	0.00010	0.00077	0.16	0.13			0.13
7439-97-6	Metals	T	Mercury	mg/l	0.00020	0.00011	0.00010	0.0014	0.14	0.078			0.071
7440-09-7	Metals	D	Potassium	mg/l	3.6	3.4	3.3	53	0.068	0.065			0.062
7440-09-7	Metals	T	Potassium	mg/l	3.7	3.5	3.5	53	0.070	0.067			0.066
7440-23-5	Metals	D	Sodium	mg/l	24	21	20	680	0.035	0.030			0.029
7440-23-5	Metals	T	Sodium	mg/l	24	21	20	680	0.035	0.031			0.029
7440-62-2	Metals	D	Vanadium	mg/l	0.010	0.0053	0.0050	0.0020	5.0	2.7			2.5
7440-66-6	Metals	D	Zinc	mg/l	0.036	0.012	0.010	0.24	0.15	0.050			0.041
7440-66-6	Metals	T	Zinc	mg/l	0.041	0.012	0.010	0.25	0.16	0.049			0.040

Table 7-5. Calculation of Hazard Quotients (HQs) for COPECs identified in 2005 surface water.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Site Max. Conc	UCL-95 (Average Conc)	Ref Max Conc	Water Quality Guideline	Site		Site Max. Conc Based on a Detected Conc[a]	Site	Reference
									HQ_{max}	HQ_{mean}		HQ_{max} Detected Conc.	HQ_{max}
108-90-7	VOCs	T	Chlorobenzene	ug/l	4.3	1.6	0.50	79000	0.000054	0.000021			0.0000063
94-75-7	Herbicides	T	2,4-D	ug/l	1.2	0.64	0.25	8.0	0.15	0.080			0.031
7429-90-5	Metals	T	Aluminum	mg/l	3.8	3.2	0.88	0.087	44	37			10
7440-38-2	Metals	T	Arsenic	mg/l	0.0066	0.0059	0.0050	0.15	0.044	0.039			0.033
7440-39-3	Metals	D	Barium	mg/l	0.076	0.075	0.051	0.0040	19	19			13
7440-39-3	Metals	T	Barium	mg/l	0.12	0.11	0.061	0.0040	30	28			15
7439-89-6	Metals	T	Iron	mg/l	3.5	3.1	1.1	1.0	3.5	3.1			1.1
7439-92-1	Metals	D	Lead	mg/l	0.0027	0.0026	0.0025	0.0093	0.29	0.27			0.27
7439-92-1	Metals	T	Lead	mg/l	0.0047	0.0041	0.0025	0.24	0.020	0.017			0.010
7439-95-4	Metals	D	Magnesium	mg/l	22	21	20	82	0.27	0.26			0.24
7439-95-4	Metals	T	Magnesium	mg/l	22	22	21	82	0.27	0.26			0.26
7439-96-5	Metals	T	Manganese	mg/l	0.25	0.23	0.084	0.12	2.1	1.9			0.70
7440-09-7	Metals	D	Potassium	mg/l	4.9	4.8	3.3	53	0.092	0.090			0.062
7440-09-7	Metals	T	Potassium	mg/l	5.5	5.5	3.5	53	0.10	0.10			0.066
7782-49-2	Metals	D	Selenium	mg/l	0.0075	0.0053	0.0050	0.0050	1.5	1.1			1.0
7440-23-5	Metals	D	Sodium	mg/l	34	33	20	680	0.050	0.048			0.029
7440-23-5	Metals	T	Sodium	mg/l	35	33	20	680	0.051	0.049			0.029
7440-28-0	Metals	T	Thallium	mg/l	0.013	0.013	0.0052	0.012	1.0	1.1	0.010	0.83	0.43
7440-62-2	Metals	T	Vanadium	mg/l	0.011	0.010	0.0050	0.0020	5.5	5.1			2.5
7440-66-6	Metals	T	Zinc	mg/l	0.065	0.037	0.010	0.25	0.26	0.15			0.040

Table 7-6. Calculation of Hazard Quotients (HQs) for COPECs identified in 2007 surface water.

CAS	Chemical Class	Total or Diss.	Analyte	Units	Site Max. Conc	UCL-95 (Average Conc)	Ref Max Conc	Water Quality Guideline	Site		Site Max. Conc Based on a Detected Conc[a]	Site	Reference
									HQ_{max}	HQ_{mean}		HQ_{max} Detected Conc.	HQ_{max}
7440-39-3	Metals	D	Barium	mg/l	0.066	0.066	0.051	0.0040	17	16			13
7440-70-2	Metals	D	Calcium	mg/l	59	59	50	116	0.51	0.51			0.43
7439-89-6	Metals	D	Iron	mg/l	0.092	0.068	0.032	1.0	0.092	0.068			0.032
7439-95-4	Metals	D	Magnesium	mg/l	21	NA	20	82	0.26	NA			0.24
7440-09-7	Metals	D	Potassium	mg/l	4.6	4.6	3.3	53	0.087	0.087			0.062
7440-23-5	Metals	D	Sodium	mg/l	34	34	20	680	0.050	0.050			0.029

Table 7-7. Detected concentrations of COPECs identified in 2002 Site sediments.

DETECTED CONCENTRATIONS IN SEDIMENTS																			
	VOCs			SVOCs	Pesticides			Herbicides			Metals								
Sample ID	1,2-Dichlorobenzene	Acetone	Chlorobenzene	p-Chloroaniline	Dieldrin	Endrin Aldehyde	Heptachlor Epoxide	Dalapon	Dichloroprop	MCPP	Arsenic	Barium	Cadmium	Copper	Lead	Manganese	Nickel	Vanadium	Zinc
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
R1AD1S		26 J								370 J	5.6	140	1.2	12	12	500	15	19	89 J
R1AM1S		98 J									2.9	75		4.8	8.1	240	8.7	9.2	34 J
R1AU1S		12 J							12 J		1.8 J	26		0.75 J	2.7	140	5	3.6	8.2 J
R1BD1S											2.3	44		1.4 J	4.9	83	8.2	6.2	
R1BM1S		3.4 J							21 J	460 J	1.5 J	16		1.1 J	1.7	150	6	3.6	8.2 J
R1BM2S		8.1 J							19 J		1.1 J	12		1.3 J	1.7	160	5	3.2	7.2 J
R1BU1S		87 J							23 J		1.4 J	11		0.9 J	1.6	110	4.7	3.1	6.7 J
R1CM1S		9.3 J							15 J		1 J	14		0.61 J	2.1	95	5.2	3.3	7.6 J
R2AD1S		40 J									7.5	170		14	11 J	310	16	20	45
R2AM1S		6.4 J									4.1	130		7.6	10 J	400	11	13	40
R2AM2S		3.5 J									4.6	130		8.4	11 J	420	11	14	41
R2AU1S		4.4 J									2.1	35		1.2 J	4 J	90	5.8	5	13
R2BD1S		3.9 J									2.6	300		2.8	5.8 J	810	6.5	15	27
R2BM1S		3.3 J									2	36		0.88 J	19 J	68	4.7	4.5	10
R2BU1S		6.3 J									2.1	53		1.6 J	4.4	86	6.5	7.2	
R2CM1S											1.4	22		0.68 J	2 J	150	6.8	3.9	8
R3AD1S		7.8 J	1.9 J			1.8 J	0.61 J		3.1 J		3	89	1.1	6.4	41 J	160	8	8.5	260 J
R3AM1S	46 J	12 J	26			2.7 J		9.9 J	6.8 J	1000 J	3.7	140	1.4	18	35 J	440	13	16	310 J
R3AU1S	44 J		5000	3000			0.31 J				3.9	170	1.1	12	47 J	540	13	16	310
R3BD1S		3.6 J				1.7 J					1.4 J	28	0.31 J	2 J	11 J	61	5.6	5.4	87 J
R3BM1S	330 J	7.9 J	11000			4.1 J	11	4.7 J		2500 J	6.1	210	1 J	19	43 J	430	17	20	180 J
R3BU1S		5.1 J	1300	1400							1.8	26		2.3 J	7 J	130	6.9	5.8	25
R3CM1S											1	16		0.58 J	1.9 J	210	4.1	3.9	6.7
R4AD1S		3 J									1.9	33			7.7 J	67	5.8	5.1	40 J
R4AM1S						1.3 J					2.5	49	0.58	5.6	11 J	110	8.2	5.5	140 J
R4AU1S		3.1 J				1.2 J					1.8	110	0.67	2.5	47 J	76	6.1	7.4	190 J
R4BD1S						2.1 J					1.8	15			4.2 J	53	3.6 J	3.7	53 J
R4BM1S											1.4 J	24		6	11 J	65	4.2	3.8	60 J
R4BU1S		3.2 J			1.2 J	1.9 J					1.6 J	20	0.3 J	1.5 J	18 J	66	4.8	4.3	71 J
R4CM1S		3.3 J				1.4 J					1.7 J	38			4.1 J	67	5.5	5.5	23 J
R4CM2S		4.4 J				2.4 J					2	21			18 J	62	5.8	5	14 J
R5AM1S		4.1 J									2.7	59	0.31 J	4.5	14	190	8.5	8.4	70
R5AM3S		3.1 J	0.56 J								1.7	50	0.32 J	3.7	10	100	6.4	6.4	70
R5AN1S		290 J									2	47		3	8.1	99	6.3	7.5	42 J
R5AU1S		9.1 J	0.29 J								2.6	63	0.26 J	5.4	18	250	7.9	8.5	59
R5BM1S		17 J									2.9	43		2.7	6.2	69	6.1	6.1	22
R5BN1S		17 J									4.8	97		9	15	370	11	13	97 J
R5BU1S		7.8 J	0.2 J								3.1	63	0.3 J	4.7	13	180	7.8	8.5	86
R5CM1S		4.4 J									2.2	28			3.4	190	7.5	4	13
R6AD1S		22 J									5.4 J	140	0.59 J	14	20	860	15	18	110
R6AM1S		150 J			0.55 J						4.6	140	0.72 J	14	29	780	15	19	160
R6AM2S		24 J									5.9	210	1.2	20	35	1000	21	25	260
R6AU1S		130 J			2.9 J						4.8 J	220	0.95 J	11	39	700	16	20	210
R6BM1S		37 J									2.9 J	77	0.36 J	3.4	10	140	8.1	7.6	91
R6BU1S		20 J									2.9 J	110	0.51 J	7.6	22	230	9.5	11	130
R6CM1S		5.5 J									1.4 J	21			3.0	130	5.4	3.7	9.4

Notes:
J - Estimated Value - Result reported is less than the reporting limit but greater than the instrument detection limit.

Table 7-8. Detected concentrations of COPECs identified in 2005 Site sediments.

DETECTED CONCENTRATIONS IN SEDIMENTS												
	VOCs		Herbicides		Metals							
Sample ID	1,4-Dichlorobenzene	Chlorobenzene	2,4-D	Dichloroprop	Arsenic	Barium	Cadmium	Copper	Manganese	Nickel	Vanadium	Zinc
	ug/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SED-SA2-GMCS-PDA9A		2.4 J			1.2	27		0.63 J	200	3.9 J	4.1	43
SED-SA2-GMCS-PDA9					2	22		0.67 J	110 J	6.1	3.2 J	8.2
SED-SA2-GMCS-PDA5		7.6			2.3	49	1.5	8	140	11	7.4	510
SED-SA2-GMCS-PDA2	200 J	78 J	120 J	31 J	6.7	180	0.57 J	18	770	19	28	210
SED-SA2-GMCS-PDA2 DUP	160 J	450	51 J	19 J	5.9	160	0.53 J	18	760	18	29	200
SED-SA2-GMCS-PDA3		4.8 J	56	15 J	3.7	97	0.75	11	420	9.7	13	260
SED-SA2-GMCS-PDA4	650	56			2.2	43	0.29 J	3.9	130	7.2	6	140
SED-SA2-GMCS-R3AM	37 J	4.7 J	63	18 J	3.4	93	1.7	9.2	210 J	7.9	8.4	540
SED-SA2-GMCS-R3BM					1.3	26		1 J	100	6.2	5.7	26
SED-SA2-GMCS-R3CM					0.98 J	17		0.66 J	71	6	4.1	9.1

Notes:
J - Estimated Value - Result reported is less than the reporting limit but greater than the instrument detection limit.

Table 7-9. Detected concentrations of COPECs identified in 2007 Site sediments.

DETECTED CONCENTRATIONS IN SEDIMENTS														
	VOCs				SVOCs		Pesticides	Herbicides	Metals					
Sample ID	1,4-Dichlorobenzene	Acetone	Chlorobenzene	Toluene	Acenaphthene	p-Chloroaniline	4,4'-DDD	Dichloroprop	Barium	Cadmium	Copper	Nickel	Vanadium	Zinc
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SED-SA2-GMCS-9		14 J	1.5 J						18		1 J	7.9	4.7	12
SED-SA2-GMCS-5		20 J	1.9 J		32 J				43		1.5 J	4.9	4	83
SED-SA2-GMCS-2	1200	300 *	19000 D	200		1900	8.8 P	56	160	2	22	16	26	370

Notes:

J - Estimated Value - Result reported is less than the reporting limit but greater than the instrument detection limit.

D - Concentrations identified from analysis of the sample at a secondary dilution.

* - LCS, LCSD, MS, MSD or Surrogate exceeds the control limits.

P - Greater than 25% (40% for CLP) difference for detected concentrations between the two GC colum

Table 7-10. Detected concentrations of COPECs identified in 2002 Site surface water.

DETECTED CONCENTRATIONS IN SURFACE WATER								
	SVOCs	Herbicides	Metals					
Sample ID	p-Chloroaniline	2,4-D	Aluminum (total)	Barium (dissolved)	Barium (total)	Copper (total)	Manganese (total)	Vanadium (dissolved)
	ug/L	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
R1AD1W			0.79	0.050	0.060		0.082	0.0016 J
R1AM1W			0.62	0.049	0.060		0.084	0.0013 J
R1AU1W			0.58	0.049	0.055		0.078	
R1BD1W			0.88	0.049	0.061		0.084	
R1BM1W			0.62	0.050	0.056		0.080	0.0014 J
R1BM2W			0.80	0.049	0.058		0.083	
R1BU1W			0.66 J	0.051	0.059		0.077	0.0017 J
R1CM1W			0.69	0.050	0.059		0.082	0.0013 J
R2AD1W			0.77	0.050	0.058		0.083	
R2AM1W			0.93	0.051	0.060		0.089	
R2AM2W			1.0	0.050	0.062		0.096	
R2AU1W			0.68	0.050	0.060		0.083	
R2BD1W			0.75	0.049	0.058		0.082	
R2BM1W			0.71	0.049	0.058		0.080	
R2BU1W			0.69	0.049	0.058		0.080	0.010 J
R2CM1W			0.80	0.051	0.060		0.082	
R3AD1W	9.4 J	3.2	0.86 J	0.051	0.063		0.093	
R3AM1W	14 J	4.1	0.94 J	0.052	0.062		0.096	
R3AU1W	160	29 J	0.77	0.054	0.065		0.14	
R3BD1W	5.2 J	2.2	0.92 J	0.052	0.065		0.098	
R3BM1W	16 J	3.8	0.78 J	0.052	0.062		0.093	
R3BU1W	10 J	5.4 J	0.77	0.051	0.058		0.088	
R3CM1W			0.84	0.049	0.060	0.039 J	0.082	
R4AD1W	8.1 J	2.8	0.96 J	0.053	0.064		0.10	
R4AM1W	3.4 J	2.5	0.89 J	0.052	0.065		0.099	
R4AU1W	5.7 J	2.4	0.81 J	0.053	0.062		0.089	
R4BD1W			0.91 J	0.052	0.063		0.089	
R4BM1W	4 J	1.7	0.77 J	0.051	0.061		0.087	
R4BU1W	3.2 J	1.7	0.70 J	0.052	0.064		0.088	
R4CM1W			0.82 J	0.050	0.061		0.083	
R4CM2W			0.70 J	0.051	0.059		0.081	
R5AD1W		1.3	0.79	0.051	0.061		0.087	
R5AM1W	1.8 J	0.97	0.52 J	0.054	0.062		0.086	
R5AN1W	1.4 J	1.8 J	0.76 J	0.051	0.061		0.084	
R5AU1W	2.2 J	1.1	0.39 J	0.053	0.062		0.087	
R5BD1W	1.2 J	0.72	0.46 J	0.054	0.061		0.082	
R5BM1W	2 J	1.1	0.72 J	0.054	0.062			
R5BN1W		1.6 J	0.69 J	0.051	0.061		0.088	0.0012 J
R5BU1W	2.3 J	0.94	0.73 J	0.053	0.062		0.083	
R5CM1W			0.15 J	0.053	0.059		0.077	
R6AD1W		0.71	0.96	0.052	0.060	0.003 J	0.082	0.0019 J
R6AM1W		1.0	0.81	0.052	0.061		0.085	
R6AM2W		0.94		0.053	0.061		0.084	
R6AU1W		0.93	1.1	0.050	0.061		0.093	
R6BM1W		0.98	0.82	0.053	0.063		0.085	
R6BU1W		0.88	0.74	0.051	0.060		0.083	
R6CM1W			0.87	0.051	0.062		0.082	

Notes:
J - Estimated Value - Result reported is less than the reporting limit but greater than the instrument detection limit.

Table 7-11. Detected concentrations of COPECs identified in 2005 Site surface water.

DETECTED CONCENTRATIONS IN SURFACE WATER						
	Metals					
Sample ID	Aluminum (total)	Barium (dissolved)	Barium (total)	Manganese (total)	Selenium (dissolved)	Vanadium (total)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SW-SA2-GMCS-PDA9A	3.7	0.074	0.11	0.24		0.011
SW-SA2-GMCS-PDA9	3.4 J	0.074	0.11	0.24		0.011
SW-SA2-GMCS-PDA5	3.8	0.074	0.12	0.25		0.011
SW-SA2-GMCS-PDA2	3.1	0.076	0.11	0.24	0.0075 J B	0.0097 J
SW-SA2-GMCS-PDA2 DUP	2.4	0.074	0.11	0.21		0.0084 J
SW-SA2-GMCS-PDA3	3.2	0.076	0.11	0.21		0.010
SW-SA2-GMCS-PDA4	2.6	0.075	0.11	0.18		0.009 J
SW-SA2-GMCS-R3AM	1.4	0.066	0.088	0.17		0.0064 J
SW-SA2-GMCS-R3BM	1.3	0.066	0.084	0.15		0.0059 J
SW-SA2-GMCS-R3CM	0.86	0.067	0.082	0.15		0.0051 J

Notes:
J - Estimated Value - Result reported is less than the reporting limit but greater than the instrument detection limit.
B - Compound is found in the associated method blanks.

Table 7-12. Detected concentrations of COPECs identified in 2007 Site surface water.

DETECTED CONCENTRATIONS IN SURFACE WATER	
	Metals
Sample ID	Barium (dissolved)
	mg/kg
SW-SA2-GMCS-9	0.065
SW-SA2-GMCS-5	0.066
SW-SA2-GMCS-2	0.065
SW-SA2-GMCS-3	0.064
SW-SA2-GMCS-4	0.066

Table 7-13 Summary of toxicity testing of sediments using *H. azteca* and *C. tentans*.

Sample ID	Toxicity Test Species			
	H. azteca		*C. tentans*	
	Is Mean Survival < Control?	Is Mean Growth < Control?	Is Mean Survival < Control?	Is Mean Growth < Control?
R1AD1S	No	No	No	No
R1AM1S	No	No	No	No
R1AU1S	No	No	No	No
R1BD1S	No	No	No	No
R1BM1S	Yes	No	No	No
R1BM2S	No	No	No	No
R1BU1S	No	No	No	No
R1CM1S	No	No	No	No
R2AD1S	No	No	No	No
R2AM1S	No	No	No	No
R2AM2S	No	No	No	No
R2AU1S	No	No	No	No
R2BD1S	No	No	No	No
R2BM1S	No	No	No	No
R2BU1S	No	No	No	No
R2CM1S	No	No	No	No
R3AD1S	No	No	No	No
R3AM1S	No	No	No	No
R3AU1S	No	No	No	No
R3BD1S	No	No	No	No
R3BM1S	No	No	No	No
R3BU1S	No	No	No	No
R3CM1S	No	No	No	No
R4AD1S	No	No	No	No
R4AM1S	No	No	No	No
R4AU1S	No	No	No	No
R4BD1S	No	No	No	No
R4BM1S	No	No	No	No
R4BU1S	No	No	No	No
R4CM1S	No	No	No	No
R4CM2S	No	No	No	No
R5AM1S	No	No	No	No
R5AN1S	No	No	No	No
R5AU1S	No	No	No	No
R5BM1S	No	No	No	No
R5BN1S	No	No	No	No
R5BU1S	No	No	No	No
R5CM1S	No	No	No	No
R6AD1S	No	No	No	No
R6AM1S	No	No	No	No
R6AM2S	No	No	No	No
R6AU1S	No	No	No	No
R6BM1S	No	No	No	No
R6BU1S	No	No	No	No
R6CM1S	No	No	No	No

Table 7-14. Results of benthic community identification and enumeration in sediment samples.

SPECIES	R6 AD	R1 BD
MOLLUSCA		
Bivalvia		
Veneroida		
Corbiculidae		
Corbicula fulminea		1
Gastropoda		
Basommatophora		
Physidae		
Physella sp.		1
ANNELIDA		
Oligochaeta		
Haplotaxida		
Naididae	6	
Tubificidae w.h.c.	3	
Tubificidae w.o.h.c.	46	3
Branchiura sowerbyi	6	2
ARTHROPODA		
Insecta		
Ephemeroptera		
Ephemeridae		
Hexagenia sp.	1	
Trichoptera		
Hydropsychidae		
Hydropsyche orris	1	
Diptera		
Ceratopogonidae		
Bezzia/Palpomyia gp.		1
Chironomidae		
Ablabesmyia rhamphe gp.	1	
Chironomus sp.	2	
Paratendipes sp.		17
TOTAL NO. OF ORGANISMS	**66**	**25**
TOTAL NO. OF TAXA	**8**	**6**

Table 7-15. Summary of statistical analyses of surface water toxicity testing using *P. promelas* and *C. dubia*.

Sample ID	Toxicity Test Species					
	P. promelas			*C. dubia*		
	Is Mean Acute Survival < Contol?	Is Mean Chronic Survival < Control?	Is Mean Growth < Control?	Is Mean Acute Survival < Contol?	Is Mean Chronic Survival < Control?	Is Mean Neonate Production < Control?
R1AD1W	No	No	No	No	No	No
R1AM1W	No	No	No	No	No	No
R1AU1W	No	No	No	No	No	No
R1BD1W	No	No	No	No	No	No
R1BM1W	No	No	No	No	No	No
R1BM2W	No	No	No	No	No	No
R1BU1W	No	No	No	No	No	No
R1CM1W	No	No	No	No	No	No
R2AD1W	No	No	No	No	No	No
R2AM1W	No	No	No	No	No	No
R2AM2W	No	No	No	No	No	No
R2AU1W	No	No	No	No	No	No
R2BD1W	No	No	No	No	No	No
R2BM1W	No	No	No	No	No	No
R2BU1W	No	No	No	No	No	No
R2CM1W	No	No	No	No	No	No
R3AD1W	No	No	No	No	No	Yes
R3AM1W	No	No	No	No	No	Yes
R3AU1W	No	No	No	Yes	Yes	Yes
R3BD1W	No	No	No	No	No	No
R3BM1W	No	No	No	No	No	Yes
R3BU1W	No	No	No	No	No	Yes
R3CM1W	No	No	No	No	No	No
R4AD1W	No	No	No	No	Yes	Yes
R4AM1W	No	No	No	No	Yes	No
R4AU1W	No	No	No	No	No	No
R4BD1W	No	No	No	No	No	No
R4BM1W	No	No	No	No	No	No
R4BU1W	No	No	No	No	No	No
R4CM1W	No	No	No	No	No	No
R4CM2W	No	No	No	No	No	No
R5AD1W	No	No	No	No	Yes	No
R5AM1W	No	No	No	No	No	No
R5AN1W	No	No	No	No	No	No
R5AU1W	No	No	No	No	No	No
R5BD1W	No	No	No	No	No	No
R5BM1W	No	No	No	No	No	No
R5BN1W	No	No	No	No	No	No
R5BU1W	No	No	No	No	No	No
R5CM1W	No	No	No	No	No	No
R6AD1W	No	No	No	No	No	No
R6AM1W	No	No	No	No	Yes	No
R6AM2W	No	No	No	No	No	No
R6AU1W	No	No	No	No	No	No
R6BM1W	No	No	No	No	No	Yes
R6BU1W	No	No	No	No	No	No
R6CM1W	No	No	No	No	No	No

Table 9-1. Summary of 2002 COPECs identified in various aquatic media and exceedances to appropriate benchmarks.

Chemical Class	Analyte	Surface water COPEC			Sediment COPEC			Bioaccm. Test (Clams)		Fish Tissue COPEC	
		COPEC ?	Hazard Quotient > 1		COPEC ?	Hazard Quotient > 1		COPEC ?	Site > Reference and Control	COPEC ?	Hazard Quotient > 1
			Max[a]	Ave		Max[a]	Ave				
VOCs	1,2-Dichlorobenzene	YES	NO	NO	YES	YES	YES	NO		YES	NO
VOCs	1,4-Dichlorobenzene	NO			NO			NO		YES	NO
VOCs	1,2-Dichloroethane	YES	NO	NO	NO			NA		NA	
VOCs	2-Butanone (MEK)	NO			YES	NO	NO	NA		NA	
VOCs	Acetone	NO			YES	YES	YES	NA		NA	
VOCs	Benzene	YES	NO	NO	YES	NO	NO	NA		NA	
VOCs	Carbon Disulfide	YES	NO	NO	NO			NA		NA	
VOCs	Chlorobenzene	YES	NO	NO	YES	YES	YES	NA		NA	
VOCs	Chloromethane	YES	NO	NO	NO			NA		NA	
VOCs	Ethylbenzene	NO			YES	NO	NO	NA		NA	
VOCs	Styrene (Monomer)	NO			YES	NO	NO	NA		NA	
VOCs	Toluene	YES	NO	NO	YES	NO	NO	NA		NA	
VOCs	Xylenes, Total	YES	NO	NO	YES	NO	NO	NA		NA	
SVOCs	2,4-Dichlorophenol	YES	NO	NO	NO			NO		YES	NO
SVOCs	2-Chlorophenol	YES	NO	NO	NO			NO		NO	
SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	YES	NO	NO	NO			NO		NO	
SVOCs	Benzo(a)anthracene	NO			YES	NO	NO	NO		NO	
SVOCs	Benzo(a)pyrene	NO			YES	NO	NO	NO		NO	
SVOCs	Benzo(b)fluoranthene	NO			YES	NO	NO	NO		NO	
SVOCs	Benzo(g,h,i)perylene	NO			YES	NO	YES	NO		NO	
SVOCs	Benzo(k)fluoranthene	NO			YES	NO	NO	NO		NO	
SVOCs	bis(2-Ethylhexyl)phthalate	NO			YES	NO	YES	YES	YES	NO	
SVOCs	Chrysene	NO			YES	NO	NO	NO		NO	
SVOCs	Fluoranthene	NO			YES	NO	NO	NO		NO	
SVOCs	Indeno(1,2,3-cd)pyrene	NO			YES	NO	YES	YES	YES	NO	
SVOCs	p-Chloroaniline	YES	YES	YES	YES	YES	YES	NO		NO	
SVOCs	Pentachlorophenol	NO			YES	NO	NO	YES	YES	NO	
SVOCs	Phenanthrene	NO			YES	NO	NO	NO		NO	
SVOCs	Phenol	YES	NO	NO	NO			NO		NO	

Table 9-1. Summary of 2002 COPECs identified in various aquatic media and exceedances to appropriate benchmarks.

Chemical Class	Analyte	Surface water COPEC			Sediment COPEC			Bioaccm. Test (Clams)		Fish Tissue COPEC	
			Hazard Quotient > 1			Hazard Quotient > 1					
		COPEC ?	Max[a]	Ave	COPEC ?	Max[a]	Ave	COPEC ?	Site > Reference and Control	COPEC ?	Hazard Quotient > 1
Pesticides	4,4'-DDD	NO			YES	NO	NO	NO		YES	NO
Pesticides	4,4'-DDE	NO			YES	NO	NO	YES	YES	YES	NO
Pesticides	4,4'-DDT	NO			YES	NO	NO	YES	YES	YES	NO
Pesticides	Alpha-BHC	NO			NO			NO		YES	NO
Pesticides	Alpha-Chlordane	NO			NO			NO		YES	NO
Pesticides	beta-BHC	NO			YES	NO	NO	NO		NO	
Pesticides	Dieldrin	NO			YES	YES	YES	NO		YES	NO
Pesticides	Endosulfan I	NO			NO			NO		YES	NO
Pesticides	Endrin	NO			NO			NO		YES	NO
Pesticides	Endrin Aldehyde	NO			YES	YES	NO	NO		YES	NO
Pesticides	Endrin Ketone	NO			YES	NO	NO	NO		NO	
Pesticides	gamma-Chlordane	NO			YES	NO	NO	NO		YES	NO
Pesticides	Heptachlor	NO			YES	NO	NO	NO		NO	
Pesticides	Heptachlor Epoxide	NO			YES	YES	NO	NO		YES	NO
Pesticides	Methoxychlor	NO			YES	NO	YES	NO		NO	
Herbicides	2,4,5-T	NO			NO			YES	NO	YES	NO
Herbicides	2,4,5-TP (Silvex)	NO			NO			NO		YES	NO
Herbicides	2,4-D	YES	YES	NO	YES	NO	NO	YES	YES	NO	
Herbicides	2,4-DB	NO			NO			YES	YES	NO	
Herbicides	Dalapon	NO			YES	NC	NC	NO		NO	
Herbicides	Dichlorprop	NO			YES	NC	NC	YES	YES	NO	
Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	NO			NO			YES	NO	NO	
Herbicides	MCPP	NO			YES	NC	NC	YES	YES	YES	YES
PCBs	Total PCB Homologs	NO			YES	NO	NO	NO		NO	
Dioxins	1,2,3,4,6,7,8,9-OCDF	NO			NO			NO		YES	NO
Dioxins	1,2,3,4,6,7,8-HCDD	NO			NO			NO		YES	NO
Dioxins	1,2,3,4,7,8-HCDD	NO			NO			NO		YES	NO
Dioxins	1,2,3,4,7,8-HxCDF	NO			NO			NO		YES	NO
Dioxins	1,2,3,6,7,8-HxCDD	NO			NO			NO		YES	NO

Table 9-1. Summary of 2002 COPECs identified in various aquatic media and exceedances to appropriate benchmarks.

Chemical Class	Analyte	Surface water COPEC			Sediment COPEC			Bioaccm. Test (Clams)		Fish Tissue COPEC	
		COPEC ?	Hazard Quotient > 1		COPEC ?	Hazard Quotient > 1		COPEC ?	Site > Reference and Control	COPEC ?	Hazard Quotient > 1
			Max[a]	Ave		Max[a]	Ave				
Dioxins	1,2,3,7,8-PcCDD	NO			NO			NO		YES	NO
Dioxins	1,2,3,7,8-PeCDF	NO			NO			NO		YES	NO
Dioxins	2,3,4,7,8-PCDF	NO			NO			NO		YES	NO
Dioxins	2,3,7,8-TCDD	NO			NO			NO		YES	NO
Dioxins	2,3,7,8-TCDD (TEQ)	NO			YES	NO	NO	NO		YES	NO
Dioxins	2,3,7,8-TCDF	NO			NO			NO		YES	NO
Dioxins	OCDD	NO			NO			YES	YES	NO	
Dioxins	Total HpCDD	NO			NO			YES	YES	NO	
Dioxins	Total TCDD	NO			NO			YES	YES	NO	
Dioxins	Total TCDF	NO			NO			YES	YES	NO	
Metals	Aluminum (T)	YES	YES	YES	YES	NO	NO	YES	NO	NA	
Metals	Arsenic (T)	YES	NO	NO	YES	YES	NO	YES	YES	NA	
Metals	Barium (D)	YES	YES	YES	NA			NA		NA	
Metals	Barium (T)	YES	YES	YES	YES	YES	YES	YES	YES	NA	
Metals	Beryllium (T)	NO			YES	NO	NO	NO		NA	
Metals	Cadmium (T)	NO			YES	YES	NO	YES	YES	NA	
Metals	Calcium (D)	YES	NO	NO	NA			NA		NA	
Metals	Calcium (T)	YES	NO	NO	YES	EN	EN	NO		NA	
Metals	Chromium (T)	NO			YES	NO	NO	YES	YES	NA	
Metals	Cobalt (T)	YES	NO	NO	YES	NO	NO	YES	YES	NA	
Metals	Copper (T)	YES	YES	NO	YES	YES	NO	YES	YES	NA	
Metals	Iron (D)	YES	NO	NO	NA			NA		NA	
Metals	Iron (T)	YES	YES	YES	YES	NO	NO	YES	YES	NA	
Metals	Lead (T)	YES	NO	NO	YES	YES	NO	YES	YES	NA	
Metals	Magnesium (D)	YES	NO	NO	NA			NA		NA	
Metals	Magnesium (T)	YES	NO	NO	YES	EN	EN	YES	NO	NA	
Metals	Manganese (T)	YES	YES	NO	YES	YES	NO	YES	YES	NA	
Metals	Mercury (D)	YES	NO	NO	NA			NA		NA	
Metals	Mercury (T)	YES	NO	NO	NO			YES	YES	NA	
Metals	Nickel (T)	NO			YES	YES	NO	YES	YES	NA	
Metals	Potassium (D)	YES	NO	NO	NA			NA		NA	

Table 9-1. Summary of 2002 COPECs identified in various aquatic media and exceedances to appropriate benchmarks.

Chemical Class	Analyte	Surface water COPEC			Sediment COPEC			Bioaccm. Test (Clams)		Fish Tissue COPEC	
			Hazard Quotient > 1			Hazard Quotient > 1					
		COPEC ?	Max[a]	Ave	COPEC ?	Max[a]	Ave	COPEC ?	Site > Reference and Control	COPEC ?	Hazard Quotient > 1
Metals	Potassium (T)	YES	NO	NO	YES	EN	EN	YES	YES	NA	
Metals	Sodium (D)	YES	NO	NO	NA			NA		NA	
Metals	Sodium (T)	YES	NO	NO	YES	EN	EN	YES	YES	NA	
Metals	Vanadium (D)	YES	YES	YES	NA			NA		NA	
Metals	Vanadium (T)	NO			YES	NC	NC	YES	YES	NA	
Metals	Zinc (D)	YES	NO	NO	NA			NA		NA	
Metals	Zinc (T)	YES	NO	NO	YES	YES	NO	YES	YES	NA	

Notes: NA - Not applicable
NC - There were no screening benchmarks available for comparison, therefore, the constituent is carried through as a COPEC.
EN - There were no screening benchmarks available for comparison, however, the constituent is considered an essential nutrient and is not carried over as a COPEC.
[a] - Max HQs based on detected concentrations.

* Shaded areas represent Hazard Quotient values greater than 1 for Surface Water, Sediment, and Fish and Site Concentration greater then Reference and Control values for Clams

Table 9-2. Summary of 2005 COPECs identified in various aquatic media and exceedances to appropriate benchmarks.

Chemical Class	Analyte	Surface water COPEC			Sediment COPEC		
			Hazard Quotient > 1			Hazard Quotient > 1	
		COPEC ?	Max[a]	Ave	COPEC ?	Max[a]	Ave
VOCs	1,4-Dichlorobenzene	NO			YES	YES	YES
VOCs	Benzene	NO			YES	NO	NO
VOCs	Chlorobenzene	YES	NO	NO	YES	YES	NO
VOCs	Ethylbenzene	NO			YES	NO	NO
VOCs	Toluene	NO			YES	NO	NO
VOCs	Xylenes, Total	NO			YES	NO	NO
SVOCs	bis(2-Ethylhexyl)phthalate	NO			YES	NO	YES
SVOCs	Pyrene	NO			YES	NO	NO
Pesticides	4,4'-DDD	NO			YES	NO	YES
Herbicides	2,4-D	YES	NO	NO	YES	YES	YES
Herbicides	Dichlorprop	NO			YES	NC	NC
Metals	Aluminum (T)	YES	YES	YES	YES	NO	NO
Metals	Arsenic (T)	YES	NO	NO	YES	YES	NO
Metals	Barium (D)	YES	YES	YES	NA		
Metals	Barium (T)	YES	YES	YES	YES	YES	YES
Metals	Beryllium (T)	NO			YES	NO	NO
Metals	Cadmium (T)	NO			YES	YES	YES
Metals	Calcium (T)	NO			YES	EN	EN
Metals	Chromium (T)	NO			YES	NO	NO
Metals	Cobalt (T)	NO			YES	NO	NO
Metals	Copper (T)	NO			YES	YES	NO
Metals	Iron (T)	YES	YES	YES	YES	NO	NO
Metals	Lead (D)	YES	NO	NO	NA		
Metals	Lead (T)	YES	NO	NO	YES	NO	NO
Metals	Magnesium (D)	YES	NO	NO	NA		
Metals	Magnesium (T)	YES	NO	NO	YES	EN	EN

Table 9-2. Summary of 2005 COPECs identified in various aquatic media and exceedances to appropriate benchmarks.

Chemical Class	Analyte	Surface water COPEC			Sediment COPEC		
			Hazard Quotient > 1			Hazard Quotient > 1	
		COPEC ?	Max[a]	Ave	COPEC ?	Max[a]	Ave
Metals	Manganese (T)	YES	YES	YES	YES	YES	NO
Metals	Nickel (T)	NO			YES	YES	NO
Metals	Potassium (D)	YES	NO	NO	NA		
Metals	Potassium (T)	YES	NO	NO	YES	EN	EN
Metals	Selenium (D)	YES	YES	YES	NA		
Metals	Sodium (D)	YES	NO	NO	NA		
Metals	Sodium (T)	YES	NO	NO	NO		
Metals	Thallium (T)	YES	NO	YES	NO		
Metals	Vanadium (T)	YES	YES	YES	YES	NC	NC
Metals	Zinc (T)	YES	NO	NO	YES	YES	YES

Notes: NA - Not applicable

NC - There were no screening benchmarks available for comparison, therefore, the constituent is carried through as a COPEC.

EN - There were no screening benchmarks available for comparison, however, the constituent is considered an essential nutrient and is not carried over as a COPEC.

[a] - Max HQs based on detected concentrations.

* Shaded areas represent Hazard Quotient values greater than 1 for Surface Water and Sediment.

Table 9-3. Summary of 2007 COPECs identified in various aquatic media and exceedances to appropriate benchmarks.

Chemical Class	Analyte	Surface water COPEC			Sediment COPEC		
		COPEC ?	Hazard Quotient > 1		COPEC ?	Hazard Quotient > 1	
			Max[a]	Ave		Max[a]	Ave
VOCs	1,4-Dichlorobenzene	NO			YES	YES	YES
VOCs	2-Butanone (MEK)	NO			YES	NO	NO
VOCs	Acetone	NO			YES	YES	YES
VOCs	Benzene	NO			YES	NO	NO
VOCs	Carbon Disulfide	NO			YES	NO	NO
VOCs	Chlorobenzene	NO			YES	YES	YES
VOCs	Ethylbenzene	NO			YES	NO	NO
VOCs	Toluene	NO			YES	YES	YES
VOCs	Xylenes, Total	NO			YES	NO	NO
SVOCs	Acenaphthene	NO			YES	YES	YES
SVOCs	Dibenzofuran	NO			YES	NO	NO
SVOCs	Diethyl Phthalate	NO			YES	NO	YES
SVOCs	Fluoranthene	NO			YES	NO	NO
SVOCs	Fluorene	NO			YES	NO	YES
SVOCs	p-Chloroaniline	NO			YES	YES	YES
Pesticides	4,4'-DDD	NO			YES	YES	YES
Herbicides	Dichlorprop	NO			YES	NC	NC
Metals	Aluminum (T)	NA			YES	NO	NO
Metals	Barium (D)	YES	YES	YES	NA		
Metals	Barium (T)	NA			YES	YES	YES
Metals	Beryllium (T)	NA			YES	NO	NO
Metals	Cadmium (T)	NA			YES	YES	YES
Metals	Calcium (D)	YES	NO	NO	NA		
Metals	Calcium (T)	NA			YES	EN	EN

Table 9-3. Summary of 2007 COPECs identified in various aquatic media and exceedances to appropriate benchmarks.

Chemical Class	Analyte	Surface water COPEC			Sediment COPEC		
		COPEC ?	Hazard Quotient > 1		COPEC ?	Hazard Quotient > 1	
			Max[a]	Ave		Max[a]	Ave
Metals	Chromium (T)	NA			YES	NO	NO
Metals	Cobalt (T)	NA			YES	NO	NO
Metals	Copper (T)	NA			YES	YES	YES
Metals	Iron (D)	YES	NO	NO	NA		
Metals	Iron (T)	NA			YES	NO	NO
Metals	Lead (T)	NA			YES	NO	NO
Metals	Magnesium (D)	YES	NO	NA	NA		
Metals	Magnesium (T)	NA			YES	EN	EN
Metals	Nickel (T)	NA			YES	YES	YES
Metals	Potassium (D)	YES	NO	NO	NA		
Metals	Potassium (T)	NA			YES	EN	EN
Metals	Sodium (D)	YES	NO	NO	NA		
Metals	Vanadium (T)	NA			YES	NC	NC
Metals	Zinc (T)	NA			YES	YES	YES

Notes: NA - Not applicable

NC - There were no screening benchmarks available for comparison, therefore, the constituent is carried through as a COPEC.

EN - There were no screening benchmarks available for comparison, however, the constituent is considered an essential nutrient and is not carried over as a COPEC.

[a] - Max HQs based on detected concentrations.

* Shaded areas represent Hazard Quotient values greater than 1 for Surface Water and Sediment.

FIGURES

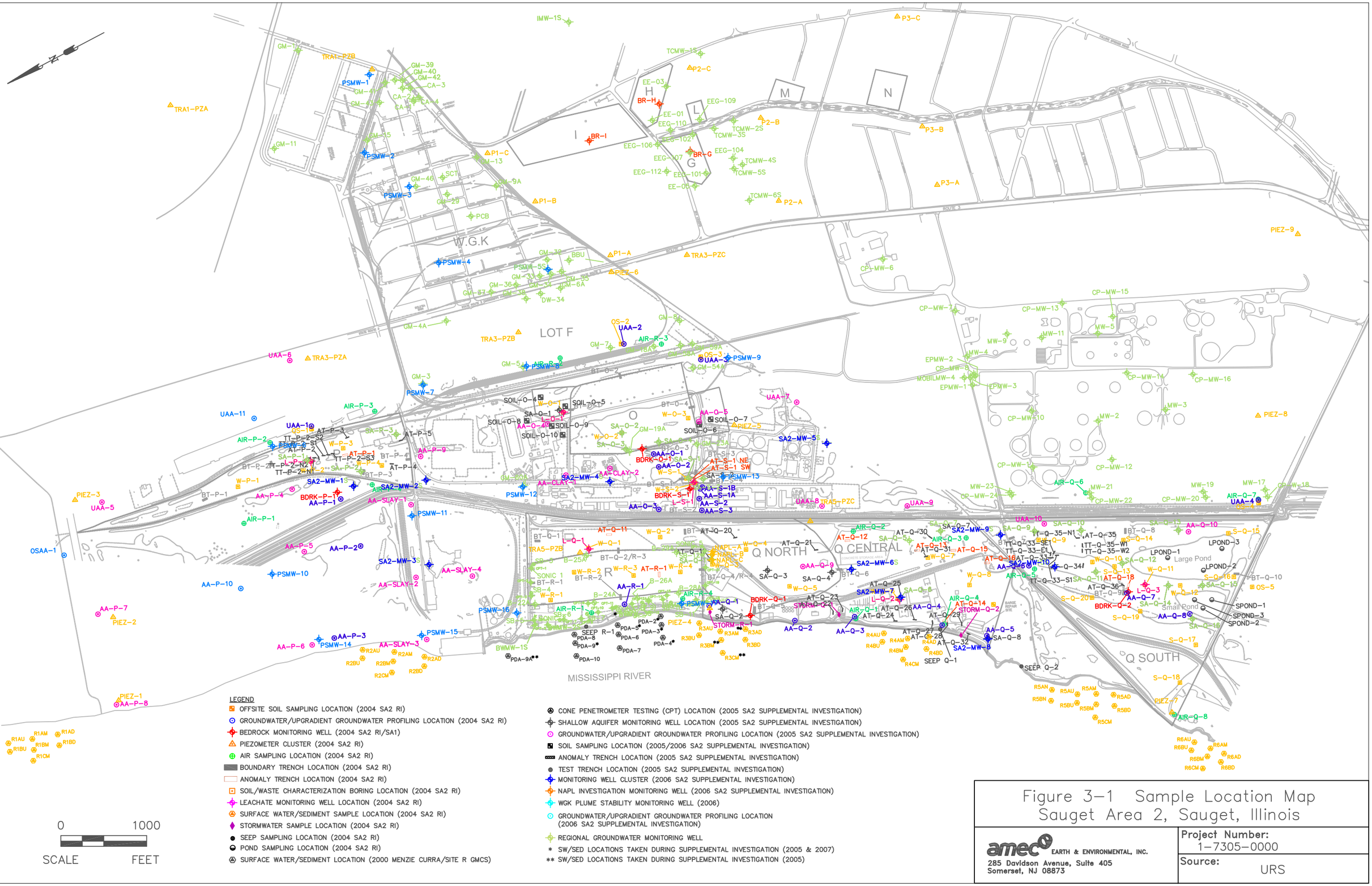

Figure 3-1 Sample Location Map
Sauget Area 2, Sauget, Illinois

amec EARTH & ENVIRONMENTAL, INC.
285 Davidson Avenue, Suite 405
Somerset, NJ 08873

Project Number: 1-7305-0000

Source: URS

APPENDICES

Appendix II-A

Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	1.4	uM	clay		19.7	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	1.4	uM	clay		3.6	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	3.2	uM	clay		23.3	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	3.2	uM	clay		3.3	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	6.4	uM	silt		26.6	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	6.4	uM	silt		3.3	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	9.3	uM	silt		29.9	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	9.3	uM	silt		3.3	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	12.8	uM	silt		33.2	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	12.8	uM	silt		13.3	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	21	uM	silt		46.5	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	21	uM	silt		8.3	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	33	uM	silt		54.8	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	33	uM	silt		6.9	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	75	uM	sand	#200	61.8	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	75	uM	sand	#200	22.3	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	150	uM	sand	#100	84.1	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	150	uM	sand	#100	2.1	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	180	uM	sand	#80	86.2	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	180	uM	sand	#80	9.8	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	250	uM	sand	#60	96.1	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	250	uM	sand	#60	3.1	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	425	uM	sand	#40	99.2	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	425	uM	sand	#40	0.4	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	850	uM	sand	#20	99.6	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	850	uM	sand	#20	0.3	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	2000	uM	sand	#10	99.9	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	2000	uM	sand	#10	0.1	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R1AD1S	Field Sample		11/20/2002	STL-VT	91064	48.32	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	1.4	uM	clay		2.5	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	1.4	uM	clay		0.1	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	3.4	uM	clay		2.6	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	3.4	uM	clay		1	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	6.9	uM	silt		3.7	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	6.9	uM	silt		0.5	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	9.7	uM	silt		4.2	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	9.7	uM	silt		1	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	13.4	uM	silt		5.2	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	13.4	uM	silt		0.5	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	23	uM	silt		5.7	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	23	uM	silt		1.6	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	36	uM	silt		7.3	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	36	uM	silt		9	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	75	uM	sand	#200	16.3	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	75	uM	sand	#200	28.7	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	150	uM	sand	#100	45.1	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	150	uM	sand	#100	8.2	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	180	uM	sand	#80	53.2	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	180	uM	sand	#80	31.8	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	250	uM	sand	#60	85	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	250	uM	sand	#60	14.4	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	425	uM	sand	#40	99.5	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	425	uM	sand	#40	0.4	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	850	uM	sand	#20	99.9	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	850	uM	sand	#20	0	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	2000	uM	sand	#10	99.9	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	2000	uM	sand	#10	0.1	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R1AM1S	Field Sample		11/20/2002	STL-VT	91064	153.7	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	1.4	uM	clay		0.4	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	1.4	uM	clay		0	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	3.5	uM	clay		0.5	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	3.5	uM	clay		0	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	7	uM	silt		0.5	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	7	uM	silt		0	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	9.7	uM	silt		0.5	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	9.7	uM	silt		0	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	13.9	uM	silt		0.5	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	13.9	uM	silt		0.2	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	24	uM	silt		0.7	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	38	uM	silt		0.7	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	38	uM	silt		1.3	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	75	uM	sand	#200	2	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	75	uM	sand	#200	2.8	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	150	uM	sand	#100	4.8	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	150	uM	sand	#100	2.7	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	180	uM	sand	#80	7.4	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	180	uM	sand	#80	7.4	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	250	uM	sand	#60	14.8	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	250	uM	sand	#60	3.2	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	425	uM	sand	#40	18	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	425	uM	sand	#40	7.9	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	850	uM	sand	#20	25.9	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	850	uM	sand	#20	23.4	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	2000	uM	sand	#10	49.3	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	2000	uM	sand	#10	41	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	4750	uM	gravel	#4	90.3	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	4750	uM	gravel	#4	8.5	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	9500	uM	gravel	3/8 inch	98.8	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	9500	uM	gravel	3/8 inch	1.2	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R1AU1S	Field Sample		11/20/2002	STL-VT	91064	354.81	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	1.4	uM	clay		2.5	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	1.4	uM	clay		0.6	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	3.3	uM	clay		3.1	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	3.3	uM	clay		0.5	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	6.8	uM	silt		3.6	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	6.8	uM	silt		0	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	9.6	uM	silt		3.6	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	9.6	uM	silt		0.5	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	13.5	uM	silt		4.1	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	13.5	uM	silt		0.5	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	23	uM	silt		4.7	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	23	uM	silt		0	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	37	uM	silt		4.7	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	37	uM	silt		1.1	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	75	uM	sand	#200	5.7	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	75	uM	sand	#200	9.3	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	150	uM	sand	#100	15	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	150	uM	sand	#100	7.5	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	180	uM	sand	#80	22.5	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	180	uM	sand	#80	54.8	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	250	uM	sand	#60	77.3	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	250	uM	sand	#60	21.7	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	425	uM	sand	#40	99	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	425	uM	sand	#40	0.6	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	850	uM	sand	#20	99.5	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	850	uM	sand	#20	0.2	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	2000	uM	sand	#10	99.8	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	2000	uM	sand	#10	0.1	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	4750	uM	gravel	#4	99.9	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	4750	uM	gravel	#4	0.1	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R1BD1S	Field Sample		11/20/2002	STL-VT	91064	155.24	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	1.4	uM	clay		0	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	1.4	uM	clay		0	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	3.3	uM	clay		0	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	3.3	uM	clay		0	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	7.1	uM	silt		0	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	7.1	uM	silt		0	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	9.7	uM	silt		0	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	9.7	uM	silt		0	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	14	uM	silt		0	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	14	uM	silt		0	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	24	uM	silt		0	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	24	uM	silt		0.3	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	38	uM	silt		0.3	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	38	uM	silt		0	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	75	uM	sand	#200	0.3	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	75	uM	sand	#200	0.1	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	150	uM	sand	#100	0.4	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	150	uM	sand	#100	0.1	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	180	uM	sand	#80	0.5	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	180	uM	sand	#80	0.4	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	250	uM	sand	#60	0.9	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	250	uM	sand	#60	0.7	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	425	uM	sand	#40	1.6	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	425	uM	sand	#40	30.4	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	850	uM	sand	#20	31.9	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	850	uM	sand	#20	49.4	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	2000	uM	sand	#10	81.3	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	2000	uM	sand	#10	16.3	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	4750	uM	gravel	#4	97.6	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	4750	uM	gravel	#4	2.4	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R1BM1S	Field Sample		11/20/2002	STL-VT	91064	276	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	1.4	uM	clay		0.2	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	1.4	uM	clay		0	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	3.4	uM	clay		0.3	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	3.4	uM	clay		0	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	7	uM	silt		0.3	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	7	uM	silt		0	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	9.5	uM	silt		0.3	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	9.5	uM	silt		0.3	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	13.9	uM	silt		0.6	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	13.9	uM	silt		0	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	24	uM	silt		0.6	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	38	uM	silt		0.6	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	38	uM	silt		0.7	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	75	uM	sand	#200	1.3	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	75	uM	sand	#200	0.1	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	150	uM	sand	#100	1.3	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	150	uM	sand	#100	0	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	180	uM	sand	#80	1.4	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	180	uM	sand	#80	0.3	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	250	uM	sand	#60	1.7	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	250	uM	sand	#60	0.6	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	425	uM	sand	#40	2.2	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	425	uM	sand	#40	30.2	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	850	uM	sand	#20	32.4	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	850	uM	sand	#20	55.1	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	2000	uM	sand	#10	87.5	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	2000	uM	sand	#10	12.2	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	4750	uM	gravel	#4	99.7	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	4750	uM	gravel	#4	0.3	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R1BM2S	Field Duplicate	R1BM1S	11/20/2002	STL-VT	91064	290.67	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	1.4	uM	clay		1.1	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	1.4	uM	clay		0.3	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	3.3	uM	clay		1.4	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	3.3	uM	clay		0	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	6.6	uM	silt		1.4	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	6.6	uM	silt		0	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	9.6	uM	silt		1.4	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	9.6	uM	silt		0	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	13.6	uM	silt		1.4	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	13.6	uM	silt		0	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	23	uM	silt		1.4	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	23	uM	silt		0	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	37	uM	silt		1.4	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	37	uM	silt		1.9	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	75	uM	sand	#200	3.3	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	75	uM	sand	#200	0.1	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	150	uM	sand	#100	3.4	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	150	uM	sand	#100	0.1	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	180	uM	sand	#80	3.5	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	180	uM	sand	#80	0.8	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	250	uM	sand	#60	4.3	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	250	uM	sand	#60	4.3	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	425	uM	sand	#40	8.6	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	425	uM	sand	#40	58.7	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	850	uM	sand	#20	67.3	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	850	uM	sand	#20	28	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	2000	uM	sand	#10	95.2	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	2000	uM	sand	#10	4.8	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R1BU1S	Field Sample		11/20/2002	STL-VT	91066	299.01	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	1.4	uM	clay		0	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	1.4	uM	clay		0	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	3.5	uM	clay		0	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	3.5	uM	clay		0	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	7	uM	silt		0	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	7	uM	silt		0	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	9.7	uM	silt		0	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	9.7	uM	silt		0	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	14	uM	silt		0	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	14	uM	silt		0	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	24	uM	silt		0	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	38	uM	silt		0	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	38	uM	silt		2.9	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	75	uM	sand	#200	2.9	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	75	uM	sand	#200	0.1	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	150	uM	sand	#100	3.1	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	150	uM	sand	#100	0.1	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	180	uM	sand	#80	3.2	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	180	uM	sand	#80	1.2	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	250	uM	sand	#60	4.3	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	250	uM	sand	#60	8.1	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	425	uM	sand	#40	12.5	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	425	uM	sand	#40	46.6	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	850	uM	sand	#20	59.1	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	850	uM	sand	#20	31.7	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	2000	uM	sand	#10	90.8	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	2000	uM	sand	#10	6.8	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	4750	uM	gravel	#4	97.6	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	4750	uM	gravel	#4	2.4	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R1CM1S	Field Sample		11/20/2002	STL-VT	91064	275.79	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	1.3	uM	clay		11.5	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	1.3	uM	clay		2.3	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	3.1	uM	clay		13.7	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	3.1	uM	clay		2.3	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	6.3	uM	silt		16	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	6.3	uM	silt		1.5	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	8.8	uM	silt		17.5	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	8.8	uM	silt		1.5	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	12.3	uM	silt		19	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	12.3	uM	silt		6.8	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	20	uM	silt		25.8	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	20	uM	silt		4.5	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	31	uM	silt		30.4	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	31	uM	silt		0.6	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	75	uM	sand	#200	31	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	75	uM	sand	#200	22.2	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	150	uM	sand	#100	53.1	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	150	uM	sand	#100	2.2	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	180	uM	sand	#80	55.3	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	180	uM	sand	#80	5	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	250	uM	sand	#60	60.3	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	250	uM	sand	#60	0.9	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	425	uM	sand	#40	61.2	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	425	uM	sand	#40	0.2	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	850	uM	sand	#20	61.5	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	850	uM	sand	#20	0.2	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	2000	uM	sand	#10	61.6	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	2000	uM	sand	#10	19.1	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	4750	uM	gravel	#4	80.8	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	4750	uM	gravel	#4	19.2	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R2AD1S	Field Sample		11/15/2002	STL-VT	91001	106.17	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	1.4	uM	clay		7.2	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	1.4	uM	clay		1.7	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	3.2	uM	clay		8.9	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	3.2	uM	clay		1.1	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	6.3	uM	silt		10	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	6.3	uM	silt		1.7	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	9	uM	silt		11.7	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	9	uM	silt		1.1	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	12.7	uM	silt		12.8	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	12.7	uM	silt		3.9	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	21	uM	silt		16.7	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	21	uM	silt		4.5	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	32	uM	silt		21.2	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	32	uM	silt		17	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	75	uM	sand	#200	38.1	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	75	uM	sand	#200	40.7	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	150	uM	sand	#100	78.8	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	150	uM	sand	#100	8.5	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	180	uM	sand	#80	87.3	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	180	uM	sand	#80	10.3	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	250	uM	sand	#60	97.6	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	250	uM	sand	#60	2.1	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	425	uM	sand	#40	99.7	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	425	uM	sand	#40	0.3	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	850	uM	sand	#20	100	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	850	uM	sand	#20	0	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R2AM1S	Field Sample		11/20/2002	STL-VT	91063	144.2	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	1.4	uM	clay		6.9	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	1.4	uM	clay		1.4	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	3.4	uM	clay		8.3	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	3.4	uM	clay		2.1	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	6.8	uM	silt		10.3	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	6.8	uM	silt		0.7	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	9.1	uM	silt		11	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	9.1	uM	silt		1.4	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	13	uM	silt		12.4	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	13	uM	silt		4.1	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	22	uM	silt		16.5	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	22	uM	silt		4.8	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	33	uM	silt		21.3	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	33	uM	silt		14.4	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	75	uM	sand	#200	35.7	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	75	uM	sand	#200	41.6	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	150	uM	sand	#100	77.3	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	150	uM	sand	#100	9.5	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	180	uM	sand	#80	86.8	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	180	uM	sand	#80	11.1	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	250	uM	sand	#60	97.9	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	250	uM	sand	#60	1.9	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	425	uM	sand	#40	99.8	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	425	uM	sand	#40	0.1	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	850	uM	sand	#20	99.8	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	850	uM	sand	#20	0.2	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R2AM2S	Field Duplicate	R2AM1S	11/20/2002	STL-VT	91063	116.74	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	1.4	uM	clay		1.2	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	1.4	uM	clay		0.6	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	3.3	uM	clay		1.9	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	3.3	uM	clay		0	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	6.9	uM	silt		1.9	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	6.9	uM	silt		0	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	9.4	uM	silt		1.9	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	9.4	uM	silt		0	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	13.7	uM	silt		1.9	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	13.7	uM	silt		0.3	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	24	uM	silt		2.2	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	37	uM	silt		2.2	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	37	uM	silt		5.9	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	75	uM	sand	#200	8.1	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	75	uM	sand	#200	12.4	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	150	uM	sand	#100	20.4	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	150	uM	sand	#100	11.2	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	180	uM	sand	#80	31.7	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	180	uM	sand	#80	39.3	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	250	uM	sand	#60	71	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	250	uM	sand	#60	25.4	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	425	uM	sand	#40	96.4	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	425	uM	sand	#40	3.5	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	850	uM	sand	#20	99.9	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	850	uM	sand	#20	0.1	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R2AU1S	Field Sample		11/20/2002	STL-VT	91063	257.14	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	1.4	uM	clay		1.5	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	1.4	uM	clay		0.3	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	3.3	uM	clay		1.8	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	3.3	uM	clay		0	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	6.9	uM	silt		1.8	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	6.9	uM	silt		0	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	9.5	uM	silt		1.8	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	9.5	uM	silt		0.3	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	13.4	uM	silt		2.1	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	13.4	uM	silt		0.6	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	23	uM	silt		2.7	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	23	uM	silt		0	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	36	uM	silt		2.7	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	36	uM	silt		26.1	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	75	uM	sand	#200	28.9	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	75	uM	sand	#200	8.7	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	150	uM	sand	#100	37.6	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	150	uM	sand	#100	6.9	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	180	uM	sand	#80	44.5	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	180	uM	sand	#80	34.3	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	250	uM	sand	#60	78.8	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	250	uM	sand	#60	18	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	425	uM	sand	#40	96.8	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	425	uM	sand	#40	1.2	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	850	uM	sand	#20	97.9	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	850	uM	sand	#20	2	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R2BD1S	Field Sample		11/15/2002	STL-VT	91001	269.61	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	1.4	uM	clay		1.5	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	1.4	uM	clay		0	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	3.4	uM	clay		1.5	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	3.4	uM	clay		0	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	6.7	uM	silt		1.5	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	6.7	uM	silt		0	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	9.8	uM	silt		1.5	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	9.8	uM	silt		0	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	13.8	uM	silt		1.5	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	13.8	uM	silt		0	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	24	uM	silt		1.5	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	38	uM	silt		1.5	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	38	uM	silt		0.5	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	75	uM	sand	#200	2	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	75	uM	sand	#200	5.3	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	150	uM	sand	#100	7.3	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	150	uM	sand	#100	7	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	180	uM	sand	#80	14.2	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	180	uM	sand	#80	44.1	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	250	uM	sand	#60	58.4	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	250	uM	sand	#60	34.1	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	425	uM	sand	#40	92.4	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	425	uM	sand	#40	4.3	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	850	uM	sand	#20	96.7	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	850	uM	sand	#20	3	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	2000	uM	sand	#10	99.7	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	2000	uM	sand	#10	0.3	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R2BM1S	Field Sample		11/20/2002	STL-VT	91063	266.58	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	1.4	uM	clay		2.6	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	1.4	uM	clay		0.3	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	1.4	uM	clay		1.4	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	1.4	uM	clay		0.1	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	3.2	uM	clay		2.9	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	3.2	uM	clay		0.9	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	3.3	uM	clay		1.5	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	3.3	uM	clay		0	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	6.6	uM	silt		3.7	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	6.6	uM	silt		0.6	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	7	uM	silt		1.5	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	7	uM	silt		0	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	9.3	uM	silt		4.3	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	9.3	uM	silt		0.3	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	9.8	uM	silt		1.5	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	9.8	uM	silt		0.5	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	12.9	uM	silt		4.6	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	12.9	uM	silt		1.1	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	13.8	uM	silt		2	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	13.8	uM	silt		0	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	22	uM	silt		5.7	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	22	uM	silt		1.4	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	24	uM	silt		2	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	34	uM	silt		7.2	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	34	uM	silt		0.4	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	38	uM	silt		2	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	38	uM	silt		0.6	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	75	uM	sand	#200	7.6	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	75	uM	sand	#200	4.2	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	75	uM	sand	#200	2.6	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	75	uM	sand	#200	10.6	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	150	uM	sand	#100	11.8	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	150	uM	sand	#100	1.8	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	150	uM	sand	#100	13.2	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	150	uM	sand	#100	9.8	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	180	uM	sand	#80	13.6	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	180	uM	sand	#80	6.2	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	180	uM	sand	#80	23	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	180	uM	sand	#80	41.8	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	250	uM	sand	#60	19.8	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	250	uM	sand	#60	10.2	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	250	uM	sand	#60	64.8	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	250	uM	sand	#60	24.6	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	425	uM	sand	#40	30	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	425	uM	sand	#40	42.9	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	425	uM	sand	#40	89.4	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	425	uM	sand	#40	7.6	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	850	uM	sand	#20	72.8	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	850	uM	sand	#20	25.3	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	850	uM	sand	#20	96.9	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	850	uM	sand	#20	2	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	2000	uM	sand	#10	98.1	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	2000	uM	sand	#10	1.8	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	2000	uM	sand	#10	98.9	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	2000	uM	sand	#10	0.7	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	4750	uM	gravel	#4	99.9	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	4750	uM	gravel	#4	0.1	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	4750	uM	gravel	#4	99.6	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	4750	uM	gravel	#4	0.4	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R2BU1S	Field Sample		11/15/2002	STL-VT	91001	282.19	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R2BU1S	Field Sample		11/20/2002	STL-VT	91064	160.89	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	1.4	uM	clay		0.8	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	1.4	uM	clay		0	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	3.4	uM	clay		0.8	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	3.4	uM	clay		0	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	7.1	uM	silt		0.8	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	7.1	uM	silt		0	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	9.8	uM	silt		0.8	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	9.8	uM	silt		0	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	13.9	uM	silt		0.8	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	13.9	uM	silt		0	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	24	uM	silt		0.8	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	38	uM	silt		0.8	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	38	uM	silt		3.4	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	75	uM	sand	#200	4.2	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	75	uM	sand	#200	0.7	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	150	uM	sand	#100	4.9	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	150	uM	sand	#100	0.3	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	180	uM	sand	#80	5.2	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	180	uM	sand	#80	2.3	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	250	uM	sand	#60	7.5	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	250	uM	sand	#60	4.2	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	425	uM	sand	#40	11.7	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	425	uM	sand	#40	31.3	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	850	uM	sand	#20	43	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	850	uM	sand	#20	45.9	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	2000	uM	sand	#10	88.8	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	2000	uM	sand	#10	10.4	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	4750	uM	gravel	#4	99.3	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	4750	uM	gravel	#4	0.7	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R2CM1S	Field Sample		11/20/2002	STL-VT	91063	388.17	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	1.4	uM	clay		2.1	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	1.4	uM	clay		0.5	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	3.4	uM	clay		2.6	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	3.4	uM	clay		0.3	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	6.6	uM	silt		2.9	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	6.6	uM	silt		0.7	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	9.5	uM	silt		3.6	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	9.5	uM	silt		0.3	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	13.4	uM	silt		3.9	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	13.4	uM	silt		0.7	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	23	uM	silt		4.6	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	23	uM	silt		1	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	36	uM	silt		5.6	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	36	uM	silt		52.6	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	75	uM	sand	#200	58.2	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	75	uM	sand	#200	25.4	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	150	uM	sand	#100	83.5	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	150	uM	sand	#100	4.2	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	180	uM	sand	#80	87.7	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	180	uM	sand	#80	4.6	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	250	uM	sand	#60	92.3	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	250	uM	sand	#60	2.6	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	425	uM	sand	#40	94.9	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	425	uM	sand	#40	0.7	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	850	uM	sand	#20	95.6	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	850	uM	sand	#20	0.2	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	2000	uM	sand	#10	95.7	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	2000	uM	sand	#10	3.2	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	4750	uM	gravel	#4	98.9	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	4750	uM	gravel	#4	1.1	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R3AD1S	Field Sample		11/15/2002	STL-VT	91001	245.5	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	1.3	uM	clay		9.8	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	1.3	uM	clay		1.3	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	3.1	uM	clay		11.1	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	3.1	uM	clay		2.6	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	6.1	uM	silt		13.7	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	6.1	uM	silt		1.3	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	8.9	uM	silt		15	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	8.9	uM	silt		1.3	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	12.3	uM	silt		16.3	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	12.3	uM	silt		5.2	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	20	uM	silt		21.4	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	20	uM	silt		6.5	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	30	uM	silt		27.9	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	30	uM	silt		17.9	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	75	uM	sand	#200	45.8	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	75	uM	sand	#200	29.7	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	150	uM	sand	#100	75.5	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	150	uM	sand	#100	9.8	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	180	uM	sand	#80	85.4	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	180	uM	sand	#80	12	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	250	uM	sand	#60	97.4	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	250	uM	sand	#60	1.7	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	425	uM	sand	#40	99.1	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	425	uM	sand	#40	0.5	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	850	uM	sand	#20	99.6	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	850	uM	sand	#20	0.4	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R3AU1S	Field Sample		11/15/2002	STL-VT	91001	124.29	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	1.4	uM	clay		0.7	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	1.4	uM	clay		0.1	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	3.4	uM	clay		0.9	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	3.4	uM	clay		0	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	6.8	uM	silt		0.9	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	6.8	uM	silt		0.3	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	9.8	uM	silt		1.1	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	9.8	uM	silt		0	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	13.9	uM	silt		1.1	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	13.9	uM	silt		0	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	24	uM	silt		1.1	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	38	uM	silt		1.1	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	38	uM	silt		1.6	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	75	uM	sand	#200	2.7	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	75	uM	sand	#200	1.3	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	150	uM	sand	#100	4	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	150	uM	sand	#100	1.5	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	180	uM	sand	#80	5.5	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	180	uM	sand	#80	15.2	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	250	uM	sand	#60	20.7	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	250	uM	sand	#60	26.5	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	425	uM	sand	#40	47.1	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	425	uM	sand	#40	36	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	850	uM	sand	#20	83.1	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	850	uM	sand	#20	15.3	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	2000	uM	sand	#10	98.4	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	2000	uM	sand	#10	1.5	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	4750	uM	gravel	#4	99.9	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	4750	uM	gravel	#4	0.1	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R3BD1S	Field Sample		11/15/2002	STL-VT	91001	281	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	1.3	uM	clay		5.6	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	1.3	uM	clay		1.1	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	3.2	uM	clay		6.7	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	3.2	uM	clay		2.5	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	6.3	uM	silt		9.2	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	6.3	uM	silt		0.3	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	8.6	uM	silt		9.5	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	8.6	uM	silt		0.6	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	12.1	uM	silt		10.2	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	12.1	uM	silt		0.3	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	21	uM	silt		10.5	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	21	uM	silt		5.1	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	30	uM	silt		15.6	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	30	uM	silt		13.9	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	75	uM	sand	#200	29.5	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	75	uM	sand	#200	21.7	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	150	uM	sand	#100	51.1	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	150	uM	sand	#100	5.4	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	180	uM	sand	#80	56.5	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	180	uM	sand	#80	17	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	250	uM	sand	#60	73.5	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	250	uM	sand	#60	12.6	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	425	uM	sand	#40	86.1	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	425	uM	sand	#40	9.3	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	850	uM	sand	#20	95.4	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	850	uM	sand	#20	4	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	2000	uM	sand	#10	99.3	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	2000	uM	sand	#10	0.7	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R3BM1S	Field Sample		11/15/2002	STL-VT	91001	252.32	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	1.4	uM	clay		1.2	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	1.4	uM	clay		0	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	3.4	uM	clay		1.2	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	3.4	uM	clay		0	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	6.8	uM	silt		1.2	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	6.8	uM	silt		0	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	9.4	uM	silt		1.2	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	9.4	uM	silt		0	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	13.6	uM	silt		1.2	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	13.6	uM	silt		0	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	23	uM	silt		1.2	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	23	uM	silt		0	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	37	uM	silt		1.2	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	37	uM	silt		2.5	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	75	uM	sand	#200	3.7	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	75	uM	sand	#200	0.1	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	150	uM	sand	#100	3.8	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	150	uM	sand	#100	0.1	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	180	uM	sand	#80	3.9	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	180	uM	sand	#80	1.9	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	250	uM	sand	#60	5.8	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	250	uM	sand	#60	14.2	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	425	uM	sand	#40	19.9	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	425	uM	sand	#40	49.8	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	850	uM	sand	#20	69.7	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	850	uM	sand	#20	25	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	2000	uM	sand	#10	94.7	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	2000	uM	sand	#10	3.4	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	4750	uM	gravel	#4	98.1	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	4750	uM	gravel	#4	1.6	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	9500	uM	gravel	3/8 inch	99.6	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	9500	uM	gravel	3/8 inch	0.4	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R3CM1S	Field Sample		11/15/2002	STL-VT	91001	358.9	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	1.4	uM	clay		1	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	1.4	uM	clay		0.1	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	3.4	uM	clay		1.2	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	3.4	uM	clay		0	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	7.1	uM	silt		1.2	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	7.1	uM	silt		0.3	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	9.8	uM	silt		1.5	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	9.8	uM	silt		0	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	13.8	uM	silt		1.5	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	13.8	uM	silt		0	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	24	uM	silt		1.5	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	24	uM	silt		0	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	38	uM	silt		1.5	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	38	uM	silt		2.2	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	75	uM	sand	#200	3.7	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	75	uM	sand	#200	1.7	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	150	uM	sand	#100	5.3	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	150	uM	sand	#100	3.5	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	180	uM	sand	#80	8.8	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	180	uM	sand	#80	38.8	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	250	uM	sand	#60	47.7	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	250	uM	sand	#60	27.7	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	425	uM	sand	#40	75.4	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	425	uM	sand	#40	9.5	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	850	uM	sand	#20	84.8	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	850	uM	sand	#20	9.4	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	2000	uM	sand	#10	94.2	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	2000	uM	sand	#10	4.9	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	4750	uM	gravel	#4	99.1	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	4750	uM	gravel	#4	0.9	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R4AD1S	Field Sample		11/15/2002	STL-VT	91001	276.16	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	1.4	uM	clay		1	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	1.4	uM	clay		0.4	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	3.5	uM	clay		1.4	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	3.5	uM	clay		0	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	7	uM	silt		1.4	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	7	uM	silt		0	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	9.6	uM	silt		1.4	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	9.6	uM	silt		0	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	13.8	uM	silt		1.4	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	13.8	uM	silt		0	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	24	uM	silt		1.4	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	38	uM	silt		1.4	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	38	uM	silt		1.2	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	75	uM	sand	#200	2.6	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	75	uM	sand	#200	5.2	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	150	uM	sand	#100	7.9	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	150	uM	sand	#100	3.7	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	180	uM	sand	#80	11.6	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	180	uM	sand	#80	18.8	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	250	uM	sand	#60	30.3	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	250	uM	sand	#60	22.7	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	425	uM	sand	#40	53.1	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	425	uM	sand	#40	22.5	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	850	uM	sand	#20	75.6	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	850	uM	sand	#20	10.4	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	2000	uM	sand	#10	86.1	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	2000	uM	sand	#10	5.1	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	4750	uM	gravel	#4	91.1	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	4750	uM	gravel	#4	6.2	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	9500	uM	gravel	3/8 inch	97.3	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	9500	uM	gravel	3/8 inch	2.7	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R4AM1S	Field Sample		11/15/2002	STL-VT	91001	280.35	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	1.4	uM	clay		1.2	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	1.4	uM	clay		0.1	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	3.3	uM	clay		1.3	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	3.3	uM	clay		0.3	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	6.9	uM	silt		1.5	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	6.9	uM	silt		0	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	9.7	uM	silt		1.5	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	9.7	uM	silt		0.3	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	13.7	uM	silt		1.8	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	13.7	uM	silt		0	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	24	uM	silt		1.8	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	24	uM	silt		0.3	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	37	uM	silt		2.1	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	37	uM	silt		4	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	75	uM	sand	#200	6.1	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	75	uM	sand	#200	8.6	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	150	uM	sand	#100	14.7	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	150	uM	sand	#100	3.4	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	180	uM	sand	#80	18	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	180	uM	sand	#80	11.6	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	250	uM	sand	#60	29.6	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	250	uM	sand	#60	10.9	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	425	uM	sand	#40	40.5	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	425	uM	sand	#40	8.5	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	850	uM	sand	#20	49	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	850	uM	sand	#20	10	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	2000	uM	sand	#10	59	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	2000	uM	sand	#10	20.8	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	4750	uM	gravel	#4	79.8	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	4750	uM	gravel	#4	16.1	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	9500	uM	gravel	3/8 inch	95.9	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	9500	uM	gravel	3/8 inch	4.1	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R4AU1S	Field Sample		11/15/2002	STL-VT	91001	311.12	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	1.4	uM	clay		1.1	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	1.4	uM	clay		0.2	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	3.4	uM	clay		1.2	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	3.4	uM	clay		0	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	6.8	uM	silt		1.2	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	6.8	uM	silt		0	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	10	uM	silt		1.2	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	10	uM	silt		0.3	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	13.8	uM	silt		1.5	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	13.8	uM	silt		0	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	24	uM	silt		1.5	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	38	uM	silt		1.5	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	38	uM	silt		1	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	75	uM	sand	#200	2.5	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	75	uM	sand	#200	0.3	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	150	uM	sand	#100	2.8	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	150	uM	sand	#100	0.3	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	180	uM	sand	#80	3.1	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	180	uM	sand	#80	10.2	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	250	uM	sand	#60	13.3	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	250	uM	sand	#60	42.3	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	425	uM	sand	#40	55.6	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	425	uM	sand	#40	36.1	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	850	uM	sand	#20	91.7	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	850	uM	sand	#20	7	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	2000	uM	sand	#10	98.7	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	2000	uM	sand	#10	1.3	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R4BD1S	Field Sample		11/15/2002	STL-VT	91001	264.39	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	1.4	uM	clay		0.4	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	1.4	uM	clay		0.4	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	3.4	uM	clay		0.9	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	3.4	uM	clay		0	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	7	uM	silt		0.9	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	7	uM	silt		0	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	9.5	uM	silt		0.9	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	9.5	uM	silt		0	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	13.9	uM	silt		0.9	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	13.9	uM	silt		0	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	24	uM	silt		0.9	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	38	uM	silt		0.9	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	38	uM	silt		1	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	75	uM	sand	#200	1.9	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	75	uM	sand	#200	1.9	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	150	uM	sand	#100	3.8	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	150	uM	sand	#100	3.2	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	180	uM	sand	#80	7	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	180	uM	sand	#80	16.5	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	250	uM	sand	#60	23.5	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	250	uM	sand	#60	40	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	425	uM	sand	#40	63.5	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	425	uM	sand	#40	30.7	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	850	uM	sand	#20	94.2	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	850	uM	sand	#20	4.8	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	2000	uM	sand	#10	99	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	2000	uM	sand	#10	0.7	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	4750	uM	gravel	#4	99.7	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	4750	uM	gravel	#4	0.3	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R4BMIS	Field Sample		11/15/2002	STL-VT	91001	272.44	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	1.4	uM	clay		0.8	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	1.4	uM	clay		0.5	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	3.3	uM	clay		1.2	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	3.3	uM	clay		0	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	7	uM	silt		1.2	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	7	uM	silt		0.3	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	9.6	uM	silt		1.6	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	9.6	uM	silt		0	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	13.8	uM	silt		1.6	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	13.8	uM	silt		0	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	24	uM	silt		1.6	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	38	uM	silt		1.6	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	38	uM	silt		0.9	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	75	uM	sand	#200	2.4	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	75	uM	sand	#200	1.9	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	150	uM	sand	#100	4.4	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	150	uM	sand	#100	2.5	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	180	uM	sand	#80	6.9	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	180	uM	sand	#80	14.5	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	250	uM	sand	#60	21.3	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	250	uM	sand	#60	23.2	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	425	uM	sand	#40	44.6	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	425	uM	sand	#40	37.8	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	850	uM	sand	#20	82.4	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	850	uM	sand	#20	15.7	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	2000	uM	sand	#10	98.1	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	2000	uM	sand	#10	1.5	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	4750	uM	gravel	#4	99.6	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	4750	uM	gravel	#4	0.4	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R4BU1S	Field Sample		11/15/2002	STL-VT	91001	258.17	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	1.4	uM	clay		0.7	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	1.4	uM	clay		0.1	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	3.5	uM	clay		0.9	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	3.5	uM	clay		0	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	7	uM	silt		0.9	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	7	uM	silt		0	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	9.7	uM	silt		0.9	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	9.7	uM	silt		0	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	13.9	uM	silt		0.9	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	13.9	uM	silt		0.3	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	24	uM	silt		1.2	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	24	uM	silt		0.3	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	38	uM	silt		1.5	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	38	uM	silt		0.1	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	75	uM	sand	#200	1.6	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	75	uM	sand	#200	1.7	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	150	uM	sand	#100	3.3	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	150	uM	sand	#100	5.3	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	180	uM	sand	#80	8.6	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	180	uM	sand	#80	34.6	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	250	uM	sand	#60	43.2	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	250	uM	sand	#60	20.4	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	425	uM	sand	#40	63.6	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	425	uM	sand	#40	7.6	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	850	uM	sand	#20	71.2	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	850	uM	sand	#20	7.7	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	2000	uM	sand	#10	79	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	2000	uM	sand	#10	6.4	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	4750	uM	gravel	#4	85.4	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	4750	uM	gravel	#4	8.5	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	9500	uM	gravel	3/8 inch	93.8	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	9500	uM	gravel	3/8 inch	6.2	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R4CM1S	Field Sample		11/15/2002	STL-VT	91001	267.86	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	1.4	uM	clay		1.3	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	1.4	uM	clay		0.1	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	3.4	uM	clay		1.4	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	3.4	uM	clay		0	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	7	uM	silt		1.4	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	7	uM	silt		0	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	9.9	uM	silt		1.4	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	9.9	uM	silt		0	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	13.8	uM	silt		1.4	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	13.8	uM	silt		0	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	24	uM	silt		1.4	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	38	uM	silt		1.4	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	38	uM	silt		6.5	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	75	uM	sand	#200	7.9	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	75	uM	sand	#200	2.2	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	150	uM	sand	#100	10.2	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	150	uM	sand	#100	5.9	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	180	uM	sand	#80	16.1	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	180	uM	sand	#80	36.1	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	250	uM	sand	#60	52.2	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	250	uM	sand	#60	16.3	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	425	uM	sand	#40	68.5	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	425	uM	sand	#40	6.2	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	850	uM	sand	#20	74.7	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	850	uM	sand	#20	6.2	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	2000	uM	sand	#10	80.9	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	2000	uM	sand	#10	7.3	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	4750	uM	gravel	#4	88.2	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	4750	uM	gravel	#4	11.8	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R4CM2S	Field Duplicate	R4CM1S	11/15/2002	STL-VT	91001	280.63	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	1.4	uM	clay		4.1	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	1.4	uM	clay		0	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	3.4	uM	clay		4.1	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	3.4	uM	clay		0.5	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	6.8	uM	silt		4.6	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	6.8	uM	silt		0	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	9.3	uM	silt		4.6	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	9.3	uM	silt		1.4	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	13.2	uM	silt		6	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	13.2	uM	silt		1.4	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	22	uM	silt		7.4	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	22	uM	silt		2.3	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	35	uM	silt		9.7	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	35	uM	silt		14.2	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	75	uM	sand	#200	23.9	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	75	uM	sand	#200	11.8	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	150	uM	sand	#100	35.7	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	150	uM	sand	#100	5	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	180	uM	sand	#80	40.6	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	180	uM	sand	#80	31.9	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	250	uM	sand	#60	72.5	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	250	uM	sand	#60	25.8	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	425	uM	sand	#40	98.3	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	425	uM	sand	#40	1.6	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	850	uM	sand	#20	99.9	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	850	uM	sand	#20	0.1	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R5AM1S	Field Sample		12/11/2002	STL-VT	90929	174.5	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	0	uM	gravel	1 inch	100	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	0	uM	gravel	1 inch	0	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	1.4	uM	clay		3.3	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	1.4	uM	clay		0	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	3.3	uM	clay		3.3	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	3.3	uM	clay		0	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	6.9	uM	silt		3.3	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	6.9	uM	silt		0.9	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	9.5	uM	silt		4.3	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	9.5	uM	silt		0.5	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	13.3	uM	silt		4.7	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	13.3	uM	silt		0.5	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	23	uM	silt		5.2	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	23	uM	silt		2.8	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	35	uM	silt		8.1	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	35	uM	silt		7.3	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	75	uM	sand	#200	15.4	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	75	uM	sand	#200	8.8	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	150	uM	sand	#100	24.2	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	150	uM	sand	#100	6.2	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	180	uM	sand	#80	30.5	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	180	uM	sand	#80	37.4	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	250	uM	sand	#60	67.9	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	250	uM	sand	#60	30.5	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	425	uM	sand	#40	98.4	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	425	uM	sand	#40	1.6	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	850	uM	sand	#20	100	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	850	uM	sand	#20	0	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R5AM3S	Field Sample		12/11/2002	STL-VT	90929	169.57	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	1.4	uM	clay		2.7	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	1.4	uM	clay		0.4	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	3.4	uM	clay		3.1	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	3.4	uM	clay		1.1	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	6.7	uM	silt		4.2	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	6.7	uM	silt		0	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	9.2	uM	silt		4.2	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	9.2	uM	silt		0.7	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	13.1	uM	silt		4.9	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	13.1	uM	silt		0.7	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	22	uM	silt		5.7	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	22	uM	silt		1.9	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	35	uM	silt		7.6	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	35	uM	silt		6.8	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	75	uM	sand	#200	14.3	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	75	uM	sand	#200	8.3	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	150	uM	sand	#100	22.7	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	150	uM	sand	#100	1.6	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	180	uM	sand	#80	24.2	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	180	uM	sand	#80	5.1	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	250	uM	sand	#60	29.3	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	250	uM	sand	#60	19.5	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	425	uM	sand	#40	48.8	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	425	uM	sand	#40	33.9	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	850	uM	sand	#20	82.7	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	850	uM	sand	#20	14.7	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	2000	uM	sand	#10	97.3	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	2000	uM	sand	#10	2.4	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	4750	uM	gravel	#4	99.7	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	4750	uM	gravel	#4	0.3	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R5AN1S	Field Sample		11/20/2002	STL-VT	91066	214.41	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	1.4	uM	clay		5.3	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	1.4	uM	clay		1	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	3.3	uM	clay		6.3	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	3.3	uM	clay		1	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	6.4	uM	silt		7.3	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	6.4	uM	silt		0.5	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	9.2	uM	silt		7.8	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	9.2	uM	silt		1.5	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	12.8	uM	silt		9.2	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	12.8	uM	silt		1.9	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	22	uM	silt		11.2	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	22	uM	silt		1	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	34	uM	silt		12.1	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	34	uM	silt		10.6	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	75	uM	sand	#200	22.7	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	75	uM	sand	#200	9.1	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	150	uM	sand	#100	31.9	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	150	uM	sand	#100	3.9	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	180	uM	sand	#80	35.8	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	180	uM	sand	#80	19.8	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	250	uM	sand	#60	55.6	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	250	uM	sand	#60	35.2	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	425	uM	sand	#40	90.8	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	425	uM	sand	#40	7.5	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	850	uM	sand	#20	98.3	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	850	uM	sand	#20	1.3	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	2000	uM	sand	#10	99.6	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	2000	uM	sand	#10	0.4	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R5AU1S	Field Sample		12/11/2002	STL-VT	90929	165.48	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	1.5	uM	clay		1.2	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	1.5	uM	clay		0.1	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	3.6	uM	clay		1.3	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	3.6	uM	clay		0	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	7.3	uM	silt		1.3	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	7.3	uM	silt		0	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	9.9	uM	silt		1.3	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	9.9	uM	silt		0.4	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	14.1	uM	silt		1.8	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	14.1	uM	silt		0	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	24	uM	silt		1.8	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	39	uM	silt		1.8	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	39	uM	silt		1	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	75	uM	sand	#200	2.8	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	75	uM	sand	#200	10.7	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	150	uM	sand	#100	13.5	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	150	uM	sand	#100	8.3	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	180	uM	sand	#80	21.8	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	180	uM	sand	#80	45.9	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	250	uM	sand	#60	67.7	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	250	uM	sand	#60	29.8	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	425	uM	sand	#40	97.6	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	425	uM	sand	#40	2.4	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	850	uM	sand	#20	99.9	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	850	uM	sand	#20	0.1	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R5BM1S	Field Sample		12/11/2002	STL-VT	90925	179.42	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	1.3	uM	clay		6.9	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	1.3	uM	clay		0.8	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	3.1	uM	clay		7.6	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	3.1	uM	clay		1.2	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	6.2	uM	silt		8.8	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	6.2	uM	silt		1.2	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	8.4	uM	silt		10	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	8.4	uM	silt		1.2	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	12.1	uM	silt		11.2	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	12.1	uM	silt		3.6	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	20	uM	silt		14.8	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	20	uM	silt		4	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	29	uM	silt		18.8	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	29	uM	silt		12.2	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	75	uM	sand	#200	31	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	75	uM	sand	#200	22.6	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	150	uM	sand	#100	53.6	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	150	uM	sand	#100	6.2	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	180	uM	sand	#80	59.8	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	180	uM	sand	#80	12.8	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	250	uM	sand	#60	72.5	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	250	uM	sand	#60	16.5	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	425	uM	sand	#40	89	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	425	uM	sand	#40	9.6	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	850	uM	sand	#20	98.6	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	850	uM	sand	#20	1.3	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	2000	uM	sand	#10	99.9	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	2000	uM	sand	#10	0.1	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R5BN1S	Field Sample		11/20/2002	STL-VT	91066	201.22	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	1.4	uM	clay		4.3	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	1.4	uM	clay		1.4	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	3.4	uM	clay		5.7	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	3.4	uM	clay		0.9	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	6.6	uM	silt		6.6	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	6.6	uM	silt		0.4	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	9.5	uM	silt		7	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	9.5	uM	silt		1.8	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	13.1	uM	silt		8.8	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	13.1	uM	silt		0.9	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	22	uM	silt		9.7	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	22	uM	silt		4.4	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	34	uM	silt		14.1	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	34	uM	silt		11.2	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	75	uM	sand	#200	25.2	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	75	uM	sand	#200	11.4	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	150	uM	sand	#100	36.6	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	150	uM	sand	#100	4.1	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	180	uM	sand	#80	40.7	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	180	uM	sand	#80	18.3	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	250	uM	sand	#60	59	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	250	uM	sand	#60	28.8	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	425	uM	sand	#40	87.8	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	425	uM	sand	#40	9.8	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	850	uM	sand	#20	97.6	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	850	uM	sand	#20	1.7	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	2000	uM	sand	#10	99.3	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	2000	uM	sand	#10	0.6	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	4750	uM	gravel	#4	99.9	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	4750	uM	gravel	#4	0.1	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R5BU1S	Field Sample		12/11/2002	STL-VT	90925	182.58	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	0	uM	gravel	1 inch	100	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	0	uM	gravel	1 inch	0	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	1.4	uM	clay		1.9	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	1.4	uM	clay		0.1	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	3.5	uM	clay		2.1	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	3.5	uM	clay		0	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	7.3	uM	silt		2.1	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	7.3	uM	silt		0	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	10	uM	silt		2.1	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	10	uM	silt		0	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	14.1	uM	silt		2.1	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	14.1	uM	silt		0	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	24	uM	silt		2.1	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	39	uM	silt		2.1	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	39	uM	silt		1.5	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	75	uM	sand	#200	3.6	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	75	uM	sand	#200	0.2	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	150	uM	sand	#100	3.8	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	150	uM	sand	#100	0.2	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	180	uM	sand	#80	3.9	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	180	uM	sand	#80	6.4	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	250	uM	sand	#60	10.3	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	250	uM	sand	#60	47	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	425	uM	sand	#40	57.2	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	425	uM	sand	#40	32.3	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	850	uM	sand	#20	89.5	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	850	uM	sand	#20	6.6	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	2000	uM	sand	#10	96.1	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	2000	uM	sand	#10	3.1	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	4750	uM	gravel	#4	99.2	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	4750	uM	gravel	#4	0.8	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R5CM1S	Field Sample		12/11/2002	STL-VT	90925	155.62	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	0	uM	gravel	1 inch	100	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	0	uM	gravel	1 inch	0	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	1.4	uM	clay		11.6	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	1.4	uM	clay		2.1	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	3.3	uM	clay		13.7	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	3.3	uM	clay		3.3	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	6.6	uM	silt		17	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	6.6	uM	silt		2.1	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	9.1	uM	silt		19.1	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	9.1	uM	silt		3.2	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	12.6	uM	silt		22.3	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	12.6	uM	silt		5.3	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	21	uM	silt		27.6	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	21	uM	silt		5.3	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	33	uM	silt		32.8	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	33	uM	silt		14.3	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	75	uM	sand	#200	47.2	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	75	uM	sand	#200	30.2	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	150	uM	sand	#100	77.4	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	150	uM	sand	#100	8	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	180	uM	sand	#80	85.4	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	180	uM	sand	#80	12.6	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	250	uM	sand	#60	98	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	250	uM	sand	#60	1.8	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	425	uM	sand	#40	99.8	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	425	uM	sand	#40	0	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	850	uM	sand	#20	99.8	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	850	uM	sand	#20	0.2	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R6AD1S	Field Sample		12/11/2002	STL-VT	90923	76.19	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	1.4	uM	clay		14.2	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	1.4	uM	clay		4.4	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	3.3	uM	clay		18.6	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	3.3	uM	clay		3.3	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	6.5	uM	silt		21.9	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	6.5	uM	silt		2.2	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	8.9	uM	silt		24.1	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	8.9	uM	silt		4.4	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	12.5	uM	silt		28.5	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	12.5	uM	silt		11	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	20	uM	silt		39.5	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	20	uM	silt		5.5	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	31	uM	silt		44.9	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	31	uM	silt		19.3	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	75	uM	sand	#200	64.3	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	75	uM	sand	#200	23.6	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	150	uM	sand	#100	87.9	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	150	uM	sand	#100	4.1	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	180	uM	sand	#80	91.9	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	180	uM	sand	#80	6.7	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	250	uM	sand	#60	98.6	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	250	uM	sand	#60	1.3	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	425	uM	sand	#40	99.9	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	425	uM	sand	#40	0	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	850	uM	sand	#20	99.9	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	850	uM	sand	#20	0.1	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R6AM1S	Field Sample		12/11/2002	STL-VT	90928	73.26	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	1.3	uM	clay		12.1	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	1.3	uM	clay		3.8	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	3.1	uM	clay		15.9	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	3.1	uM	clay		4.4	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	6	uM	silt		20.3	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	6	uM	silt		2.5	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	8.2	uM	silt		22.9	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	8.2	uM	silt		2.5	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	11.5	uM	silt		25.4	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	11.5	uM	silt		5.7	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	19	uM	silt		31.1	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	19	uM	silt		7	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	27	uM	silt		38.1	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	27	uM	silt		25.5	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	75	uM	sand	#200	63.6	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	75	uM	sand	#200	22	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	150	uM	sand	#100	85.6	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	150	uM	sand	#100	5	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	180	uM	sand	#80	90.5	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	180	uM	sand	#80	7.5	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	250	uM	sand	#60	98.1	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	250	uM	sand	#60	1.8	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	425	uM	sand	#40	99.9	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	425	uM	sand	#40	0.1	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	850	uM	sand	#20	100	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	850	uM	sand	#20	0	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R6AM2S	Field Duplicate	R6AM1S	12/11/2002	STL-VT	90928	126.39	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	1.4	uM	clay		16.4	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	1.4	uM	clay		6.1	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	3.1	uM	clay		22.5	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	3.1	uM	clay		4.9	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	6.1	uM	silt		27.4	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	6.1	uM	silt		3.6	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	8.7	uM	silt		31	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	8.7	uM	silt		4.7	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	12	uM	silt		35.7	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	12	uM	silt		9.5	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	20	uM	silt		45.2	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	20	uM	silt		7.1	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	30	uM	silt		52.3	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	30	uM	silt		17.9	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	75	uM	sand	#200	70.2	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	75	uM	sand	#200	14.7	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	150	uM	sand	#100	84.8	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	150	uM	sand	#100	3.5	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	180	uM	sand	#80	88.3	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	180	uM	sand	#80	8.9	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	250	uM	sand	#60	97.2	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	250	uM	sand	#60	2.6	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	425	uM	sand	#40	99.9	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	425	uM	sand	#40	0	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	850	uM	sand	#20	99.9	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	850	uM	sand	#20	0.1	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R6AU1S	Field Sample		12/11/2002	STL-VT	90923	67.84	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	1.4	uM	clay		1.6	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	1.4	uM	clay		0	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	3.4	uM	clay		1.6	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	3.4	uM	clay		0.6	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	6.7	uM	silt		2.2	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	6.7	uM	silt		0	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	9.8	uM	silt		2.2	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	9.8	uM	silt		0.3	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	13.6	uM	silt		2.5	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	13.6	uM	silt		0.6	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	23	uM	silt		3.2	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	23	uM	silt		0.9	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	36	uM	silt		4.1	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	36	uM	silt		6.5	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	75	uM	sand	#200	10.6	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	75	uM	sand	#200	47.5	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	150	uM	sand	#100	58.1	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	150	uM	sand	#100	11.7	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	180	uM	sand	#80	69.8	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	180	uM	sand	#80	21.5	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	250	uM	sand	#60	91.3	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	250	uM	sand	#60	8.5	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	425	uM	sand	#40	99.8	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	425	uM	sand	#40	0.2	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	850	uM	sand	#20	100	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	850	uM	sand	#20	0	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R6BM1S	Field Sample		12/11/2002	STL-VT	90928	254.9	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	1.4	uM	clay		5.7	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	1.4	uM	clay		1.3	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	3.3	uM	clay		6.9	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	3.3	uM	clay		0.7	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	6.4	uM	silt		7.6	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	6.4	uM	silt		1.3	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	9.2	uM	silt		8.9	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	9.2	uM	silt		1.3	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	12.9	uM	silt		10.2	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	12.9	uM	silt		2.5	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	22	uM	silt		12.7	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	22	uM	silt		1.9	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	34	uM	silt		14.6	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	34	uM	silt		13.4	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	75	uM	sand	#200	27.9	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	75	uM	sand	#200	31.5	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	150	uM	sand	#100	59.4	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	150	uM	sand	#100	10.2	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	180	uM	sand	#80	69.6	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	180	uM	sand	#80	22.7	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	250	uM	sand	#60	92.3	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	250	uM	sand	#60	7.3	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	425	uM	sand	#40	99.6	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	425	uM	sand	#40	0.2	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	850	uM	sand	#20	99.8	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	850	uM	sand	#20	0.2	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	2000	uM	sand	#10	100	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	2000	uM	sand	#10	0	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R6BU1S	Field Sample		12/11/2002	STL-VT	90923	127.79	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	1.4	uM	clay		1.2	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	1.4	uM	clay		0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	3.3	uM	clay		1.2	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	3.3	uM	clay		0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	7	uM	silt		1.2	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	7	uM	silt		0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	9.6	uM	silt		1.2	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	9.6	uM	silt		0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	13.9	uM	silt		1.2	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	13.9	uM	silt		0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	24	uM	silt		1.2	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	24	uM	silt		0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	38	uM	silt		1.2	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	38	uM	silt		1.3	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	75	uM	sand	#200	2.5	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	75	uM	sand	#200	0.7	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	150	uM	sand	#100	3.2	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	150	uM	sand	#100	0.4	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	180	uM	sand	#80	3.6	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	180	uM	sand	#80	12.7	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	250	uM	sand	#60	16.3	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	250	uM	sand	#60	57.6	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	425	uM	sand	#40	73.9	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	425	uM	sand	#40	18.3	Percent Incremental

Appendix II-A
Results of Grain-Size Analysis of Sediments Collected from Mississippi River near Sauget Area 2 Sites in 2002

Sample ID	Sample Type	Parent	Sample Date	Lab	SDG (STL-VT)	Sample Mass	Mass Units	Test Method	Reference	Particle Size	Particle Size Units	Soil Classification	Sieve Size	Result	Result Units
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	850	uM	sand	#20	92.3	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	850	uM	sand	#20	4.6	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	2000	uM	sand	#10	96.9	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	2000	uM	sand	#10	3.1	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
R6CM1S	Field Sample		12/11/2002	STL-VT	90928	274.14	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	1.3	uM	clay		6.9	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	1.3	uM	clay		1.9	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	3.1	uM	clay		8.8	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	3.1	uM	clay		2	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	6.2	uM	silt		10.8	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	6.2	uM	silt		1.7	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	8.1	uM	silt		12.5	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	8.1	uM	silt		1.3	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	11.4	uM	silt		13.8	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	11.4	uM	silt		1.3	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	19	uM	silt		15.2	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	19	uM	silt		3.4	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	28	uM	silt		18.5	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	28	uM	silt		0.3	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	75	uM	sand	#200	18.9	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	75	uM	sand	#200	32.8	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	150	uM	sand	#100	51.7	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	150	uM	sand	#100	12	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	180	uM	sand	#80	63.7	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	180	uM	sand	#80	18.9	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	250	uM	sand	#60	82.6	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	250	uM	sand	#60	6.8	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	425	uM	sand	#40	89.4	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	425	uM	sand	#40	3.3	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	850	uM	sand	#20	92.7	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	850	uM	sand	#20	7.2	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	2000	uM	sand	#10	99.9	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	2000	uM	sand	#10	0.1	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	4750	uM	gravel	#4	100	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	4750	uM	gravel	#4	0	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	9500	uM	gravel	3/8 inch	100	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	9500	uM	gravel	3/8 inch	0	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	19000	uM	gravel	3/4 inch	100	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	19000	uM	gravel	3/4 inch	0	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	25000	uM	gravel	1 inch	100	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	25000	uM	gravel	1 inch	0	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	37500	uM	gravel	1.5 inch	100	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	37500	uM	gravel	1.5 inch	0	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	50000	uM	gravel	2 inch	100	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	50000	uM	gravel	2 inch	0	Percent Incremental
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	75000	uM	gravel	3 inch	100	Percent Finer
RSAM1S	Field Sample		11/15/2002	STL-VT	91001	238.11	g	D422	ASTM	75000	uM	gravel	3 inch	0	Percent Incremental

Appendix II-B1

Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2002

Appendix II-B1
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1AU1S		11/16/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	75-34-3	1,1-Dichloroethane	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	75-35-4	1,1-Dichloroethylene	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	107-06-2	1,2-Dichloroethane	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	78-87-5	1,2-Dichloropropane	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	93-76-5	2,4,5-T	8.8	R	8.8	ug/kg
R1AU1S		11/16/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	8.8	R	8.8	ug/kg
R1AU1S		11/16/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	94-75-7	2,4-D	8.8	R	8.8	ug/kg
R1AU1S		11/16/2002	Field Sample	94-82-6	2,4-DB	8.8	R	8.8	ug/kg
R1AU1S		11/16/2002	Field Sample	120-83-2	2,4-Dichlorophenol	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	105-67-9	2,4-Dimethylphenol	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	51-28-5	2,4-Dinitrophenol	1800	UJ	1800	ug/kg
R1AU1S		11/16/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	78-93-3	2-Butanone (MEK)	17	U	17	ug/kg
R1AU1S		11/16/2002	Field Sample	91-58-7	2-Chloronaphthalene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	95-57-8	2-Chlorophenol	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	91-57-6	2-Methylnaphthalene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	88-74-4	2-Nitroaniline	1800	UJ	1800	ug/kg
R1AU1S		11/16/2002	Field Sample	88-75-5	2-Nitrophenol	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	700	U	700	ug/kg
R1AU1S		11/16/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	99-09-2	3-Nitroaniline	1800	UJ	1800	ug/kg
R1AU1S		11/16/2002	Field Sample	72-54-8	4,4'-DDD	3.5	U	3.5	ug/kg
R1AU1S		11/16/2002	Field Sample	72-55-9	4,4'-DDE	3.5	U	3.5	ug/kg
R1AU1S		11/16/2002	Field Sample	50-29-3	4,4'-DDT	3.5	U	3.5	ug/kg
R1AU1S		11/16/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	1800	U	1800	ug/kg
R1AU1S		11/16/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	17	U	17	ug/kg
R1AU1S		11/16/2002	Field Sample	100-02-7	4-Nitrophenol	1800	U	1800	ug/kg
R1AU1S		11/16/2002	Field Sample	83-32-9	Acenaphthene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	208-96-8	Acenaphthylene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	67-64-1	Acetone	12	J	18	ug/kg
R1AU1S		11/16/2002	Field Sample	309-00-2	Aldrin	1.8	U	1.8	ug/kg
R1AU1S		11/16/2002	Field Sample	319-84-6	alpha-BHC	1.8	U	1.8	ug/kg
R1AU1S		11/16/2002	Field Sample	5103-71-9	alpha-Chlordane	1.8	U	1.8	ug/kg
R1AU1S		11/16/2002	Field Sample	7429-90-5	Aluminum	630		0.02	mg/kg
R1AU1S		11/16/2002	Field Sample	120-12-7	Anthracene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	7440-36-0	Antimony	2.1	U	2.1	mg/kg
R1AU1S		11/16/2002	Field Sample	7440-38-2	Arsenic	1.8	J	0.01	mg/kg
R1AU1S		11/16/2002	Field Sample	7440-39-3	Barium	26		0.94	mg/kg
R1AU1S		11/16/2002	Field Sample	71-43-2	Benzene	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	56-55-3	Benzo(a)anthracene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	50-32-8	Benzo(a)pyrene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	7440-41-7	Beryllium	0.42	U	0.42	mg/kg
R1AU1S		11/16/2002	Field Sample	319-85-7	beta-BHC	1.8	U	1.8	ug/kg
R1AU1S		11/16/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	75-27-4	Bromodichloromethane	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	75-25-2	Bromoform	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	74-83-9	Bromomethane	6.8	UJ	6.8	ug/kg
R1AU1S		11/16/2002	Field Sample	7440-43-9	Cadmium	0.48	UJ	0.48	mg/kg
R1AU1S		11/16/2002	Field Sample	7440-70-2	Calcium	860		1.1	mg/kg
R1AU1S		11/16/2002	Field Sample	86-74-8	Carbazole	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	75-15-0	Carbon Disulfide	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	56-23-5	Carbon Tetrachloride	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	108-90-7	Chlorobenzene	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	124-48-1	Chlorodibromomethane	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	75-00-3	Chloroethane	6.8	U	6.8	ug/kg
R1AU1S		11/16/2002	Field Sample	67-66-3	Chloroform	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	74-87-3	Chloromethane	6.8	UJ	6.8	ug/kg

Appendix II-B1
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1AU1S		11/16/2002	Field Sample	7440-47-3	Chromium	1.6		0.01	mg/kg
R1AU1S		11/16/2002	Field Sample	218-01-9	Chrysene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	7440-48-4	Cobalt	2.4		0.01	mg/kg
R1AU1S		11/16/2002	Field Sample	7440-50-8	Copper	0.75	J	0.01	mg/kg
R1AU1S		11/16/2002	Field Sample	75-99-0	Dalapon	2100	R	2100	ug/kg
R1AU1S		11/16/2002	Field Sample	2051-24-3	Decachlorobiphenyl	18	U	18	ug/kg
R1AU1S		11/16/2002	Field Sample	319-86-8	delta-BHC	1.8	U	1.8	ug/kg
R1AU1S		11/16/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	132-64-9	Dibenzofuran	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	1918-00-9	Dicamba	21	R	21	ug/kg
R1AU1S		11/16/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	3.5	U	3.5	ug/kg
R1AU1S		11/16/2002	Field Sample	75-09-2	Dichloromethane	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	120-36-5	Dichlorprop	12	J	100	ug/kg
R1AU1S		11/16/2002	Field Sample	60-57-1	Dieldrin	3.5	U	3.5	ug/kg
R1AU1S		11/16/2002	Field Sample	84-66-2	Diethyl Phthalate	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	131-11-3	Dimethyl Phthalate	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	84-74-2	Di-n-butylphthalate	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	117-84-0	Di-n-octylphthalate	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	88-85-7	Dinoseb	350	UJ	350	ug/kg
R1AU1S		11/16/2002	Field Sample	959-98-8	Endosulfan I	1.8	U	1.8	ug/kg
R1AU1S		11/16/2002	Field Sample	33213-65-9	Endosulfan II	3.5	U	3.5	ug/kg
R1AU1S		11/16/2002	Field Sample	1031-07-8	Endosulfan Sulfate	3.5	U	3.5	ug/kg
R1AU1S		11/16/2002	Field Sample	72-20-8	Endrin	3.5	U	3.5	ug/kg
R1AU1S		11/16/2002	Field Sample	7421-93-4	Endrin Aldehyde	3.5	U	3.5	ug/kg
R1AU1S		11/16/2002	Field Sample	53494-70-5	Endrin Ketone	3.5	U	3.5	ug/kg
R1AU1S		11/16/2002	Field Sample	100-41-4	Ethylbenzene	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	206-44-0	Fluoranthene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	86-73-7	Fluorene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	1.8	U	1.8	ug/kg
R1AU1S		11/16/2002	Field Sample	5103-74-2	gamma-Chlordane	1.8	U	1.8	ug/kg
R1AU1S		11/16/2002	Field Sample	76-44-8	Heptachlor	1.8	U	1.8	ug/kg
R1AU1S		11/16/2002	Field Sample	1024-57-3	Heptachlor Epoxide	1.8	U	1.8	ug/kg
R1AU1S		11/16/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	11	U	11	ug/kg
R1AU1S		11/16/2002	Field Sample	118-74-1	Hexachlorobenzene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	7.1	U	7.1	ug/kg
R1AU1S		11/16/2002	Field Sample	87-68-3	Hexachlorobutadiene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	350	UJ	350	ug/kg
R1AU1S		11/16/2002	Field Sample	67-72-1	Hexachloroethane	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	7439-89-6	Iron	3900		0.05	mg/kg
R1AU1S		11/16/2002	Field Sample	78-59-1	Isophorone	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	7439-92-1	Lead	2.7		0.005	mg/kg
R1AU1S		11/16/2002	Field Sample	7439-95-4	Magnesium	380		47	mg/kg
R1AU1S		11/16/2002	Field Sample	7439-96-5	Manganese	140		0.01	mg/kg
R1AU1S		11/16/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2100	R	2100	ug/kg
R1AU1S		11/16/2002	Field Sample	93-65-2	MCPP	2100	R	2100	ug/kg
R1AU1S		11/16/2002	Field Sample	7439-97-6	Mercury	0.0045	J	0.017	mg/kg
R1AU1S		11/16/2002	Field Sample	72-43-5	Methoxychlor	18	U	18	ug/kg
R1AU1S		11/16/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	17	U	17	ug/kg
R1AU1S		11/16/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	3.5	U	3.5	ug/kg
R1AU1S		11/16/2002	Field Sample	91-20-3	Naphthalene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	7440-02-0	Nickel	5		0.04	mg/kg
R1AU1S		11/16/2002	Field Sample	98-95-3	Nitrobenzene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	18	U	18	ug/kg
R1AU1S		11/16/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	11	U	11	ug/kg
R1AU1S		11/16/2002	Field Sample	106-47-8	P-Chloroaniline	700	U	700	ug/kg
R1AU1S		11/16/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	7.1	U	7.1	ug/kg
R1AU1S		11/16/2002	Field Sample	87-86-5	Pentachlorophenol	18	R	18	ug/kg
R1AU1S		11/16/2002	Field Sample	PH	pH	7.3		1	units
R1AU1S		11/16/2002	Field Sample	85-01-8	Phenanthrene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	108-95-2	Phenol	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	100-01-6	P-Nitroaniline	1800	U	1800	ug/kg
R1AU1S		11/16/2002	Field Sample	7440-09-7	Potassium	120		94	mg/kg
R1AU1S		11/16/2002	Field Sample	129-00-0	Pyrene	350	U	350	ug/kg
R1AU1S		11/16/2002	Field Sample	7782-49-2	Selenium	0.97	U	0.97	mg/kg
R1AU1S		11/16/2002	Field Sample	7440-22-4	Silver	0.97	UJ	0.97	mg/kg
R1AU1S		11/16/2002	Field Sample	7440-23-5	Sodium	26	J	100	mg/kg
R1AU1S		11/16/2002	Field Sample	100-42-5	Styrene (Monomer)	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	7.1	U	7.1	ug/kg
R1AU1S		11/16/2002	Field Sample	127-18-4	Tetrachloroethene	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	7440-28-0	Thallium	0.97	U	0.97	mg/kg
R1AU1S		11/16/2002	Field Sample	108-88-3	Toluene	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R1AU1S		11/16/2002	Field Sample	8001-35-2	Toxaphene	180	U	180	ug/kg
R1AU1S		11/16/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3.4	U	3.4	ug/kg
R1AU1S		11/16/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	3.5	U	3.5	ug/kg
R1AU1S		11/16/2002	Field Sample	79-01-6	Trichloroethylene	3.4	U	3.4	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1AU1S		11/16/2002	Field Sample	7440-62-2	Vanadium	3.6		0.01	mg/kg
R1AU1S		11/16/2002	Field Sample	75-01-4	Vinyl chloride	6.8	U	6.8	ug/kg
R1AU1S		11/16/2002	Field Sample	1330-20-7	Xylenes, Total	11	U	11	ug/kg
R1AU1S		11/16/2002	Field Sample	7440-66-6	Zinc	8.2	J	0.02	mg/kg
R1BU1S		11/17/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	75-34-3	1,1-Dichloroethane	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	75-35-4	1,1-Dichloroethylene	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	107-06-2	1,2-Dichloroethane	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	78-87-5	1,2-Dichloropropane	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	340	U	340	ug/kg
R1BU1S		11/16/2002	Field Sample	93-76-5	2,4,5-T	8.6	R	8.6	ug/kg
R1BU1S		11/16/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	8.6	R	8.6	ug/kg
R1BU1S		11/17/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	340	U	340	ug/kg
R1BU1S		11/16/2002	Field Sample	94-75-7	2,4-D	8.6	R	8.6	ug/kg
R1BU1S		11/16/2002	Field Sample	94-82-6	2,4-DB	8.6	R	8.6	ug/kg
R1BU1S		11/17/2002	Field Sample	120-83-2	2,4-Dichlorophenol	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	105-67-9	2,4-Dimethylphenol	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	51-28-5	2,4-Dinitrophenol	1800	UJ	1800	ug/kg
R1BU1S		11/17/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	78-93-3	2-Butanone (MEK)	15	U	15	ug/kg
R1BU1S		11/17/2002	Field Sample	91-58-7	2-Chloronaphthalene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	95-57-8	2-Chlorophenol	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	91-57-6	2-Methylnaphthalene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	88-74-4	2-Nitroaniline	1800	UJ	1800	ug/kg
R1BU1S		11/17/2002	Field Sample	88-75-5	2-Nitrophenol	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	690	U	690	ug/kg
R1BU1S		11/17/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	99-09-2	3-Nitroaniline	1800	UJ	1800	ug/kg
R1BU1S		11/17/2002	Field Sample	72-54-8	4,4'-DDD	3.4	U	3.4	ug/kg
R1BU1S		11/17/2002	Field Sample	72-55-9	4,4'-DDE	3.4	U	3.4	ug/kg
R1BU1S		11/17/2002	Field Sample	50-29-3	4,4'-DDT	3.4	U	3.4	ug/kg
R1BU1S		11/17/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	1800	U	1800	ug/kg
R1BU1S		11/17/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	15	U	15	ug/kg
R1BU1S		11/17/2002	Field Sample	100-02-7	4-Nitrophenol	1800	U	1800	ug/kg
R1BU1S		11/17/2002	Field Sample	83-32-9	Acenaphthene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	208-96-8	Acenaphthylene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	67-64-1	Acetone	87	J	18	ug/kg
R1BU1S		11/17/2002	Field Sample	309-00-2	Aldrin	1.8	U	1.8	ug/kg
R1BU1S		11/17/2002	Field Sample	319-84-6	alpha-BHC	1.8	U	1.8	ug/kg
R1BU1S		11/17/2002	Field Sample	5103-71-9	alpha-Chlordane	1.8	U	1.8	ug/kg
R1BU1S		11/17/2002	Field Sample	7429-90-5	Aluminum	670		0.02	mg/kg
R1BU1S		11/17/2002	Field Sample	120-12-7	Anthracene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	7440-36-0	Antimony	2.1	U	2.1	mg/kg
R1BU1S		11/17/2002	Field Sample	7440-38-2	Arsenic	1.4	J	0.01	mg/kg
R1BU1S		11/17/2002	Field Sample	7440-39-3	Barium	11		0.94	mg/kg
R1BU1S		11/17/2002	Field Sample	71-43-2	Benzene	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	56-55-3	Benzo(a)anthracene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	50-32-8	Benzo(a)pyrene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	7440-41-7	Beryllium	0.42	U	0.42	mg/kg
R1BU1S		11/17/2002	Field Sample	319-85-7	beta-BHC	1.8	U	1.8	ug/kg
R1BU1S		11/17/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	75-27-4	Bromodichloromethane	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	75-25-2	Bromoform	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	74-83-9	Bromomethane	6.1	UJ	6.1	ug/kg
R1BU1S		11/17/2002	Field Sample	7440-43-9	Cadmium	0.52	UJ	0.52	mg/kg
R1BU1S		11/17/2002	Field Sample	7440-70-2	Calcium	1100		1.1	mg/kg
R1BU1S		11/17/2002	Field Sample	86-74-8	Carbazole	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	75-15-0	Carbon Disulfide	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	56-23-5	Carbon Tetrachloride	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	108-90-7	Chlorobenzene	3.1	U	3.1	ug/kg

Appendix II-B1
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1BU1S		11/17/2002	Field Sample	124-48-1	Chlorodibromomethane	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	75-00-3	Chloroethane	6.1	U	6.1	ug/kg
R1BU1S		11/17/2002	Field Sample	67-66-3	Chloroform	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	74-87-3	Chloromethane	6.1	UJ	6.1	ug/kg
R1BU1S		11/17/2002	Field Sample	7440-47-3	Chromium	2.2		0.01	mg/kg
R1BU1S		11/17/2002	Field Sample	218-01-9	Chrysene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	7440-48-4	Cobalt	2.3		0.01	mg/kg
R1BU1S		11/17/2002	Field Sample	7440-50-8	Copper	0.9	J	0.01	mg/kg
R1BU1S		11/16/2002	Field Sample	75-99-0	Dalapon	2100	R	2100	ug/kg
R1BU1S		11/17/2002	Field Sample	2051-24-3	Decachlorobiphenyl	18	U	18	ug/kg
R1BU1S		11/17/2002	Field Sample	319-86-8	delta-BHC	1.8	U	1.8	ug/kg
R1BU1S		11/17/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	132-64-9	Dibenzofuran	340	U	340	ug/kg
R1BU1S		11/16/2002	Field Sample	1918-00-9	Dicamba	21	R	21	ug/kg
R1BU1S		11/17/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	3.4	U	3.4	ug/kg
R1BU1S		11/17/2002	Field Sample	75-09-2	Dichloromethane	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	120-36-5	Dichlorprop	23	J	100	ug/kg
R1BU1S		11/17/2002	Field Sample	60-57-1	Dieldrin	3.4	U	3.4	ug/kg
R1BU1S		11/17/2002	Field Sample	84-66-2	Diethyl Phthalate	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	131-11-3	Dimethyl Phthalate	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	84-74-2	Di-n-butylphthalate	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	117-84-0	Di-n-octylphthalate	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	88-85-7	Dinoseb	340	UJ	340	ug/kg
R1BU1S		11/17/2002	Field Sample	959-98-8	Endosulfan I	1.8	U	1.8	ug/kg
R1BU1S		11/17/2002	Field Sample	33213-65-9	Endosulfan II	3.4	U	3.4	ug/kg
R1BU1S		11/17/2002	Field Sample	1031-07-8	Endosulfan Sulfate	3.4	U	3.4	ug/kg
R1BU1S		11/17/2002	Field Sample	72-20-8	Endrin	3.4	U	3.4	ug/kg
R1BU1S		11/17/2002	Field Sample	7421-93-4	Endrin Aldehyde	3.4	U	3.4	ug/kg
R1BU1S		11/17/2002	Field Sample	53494-70-5	Endrin Ketone	3.4	U	3.4	ug/kg
R1BU1S		11/17/2002	Field Sample	100-41-4	Ethylbenzene	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	206-44-0	Fluoranthene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	86-73-7	Fluorene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	1.8	U	1.8	ug/kg
R1BU1S		11/17/2002	Field Sample	5103-74-2	gamma-Chlordane	1.8	U	1.8	ug/kg
R1BU1S		11/17/2002	Field Sample	76-44-8	Heptachlor	1.8	U	1.8	ug/kg
R1BU1S		11/17/2002	Field Sample	1024-57-3	Heptachlor Epoxide	1.8	U	1.8	ug/kg
R1BU1S		11/17/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	10	U	10	ug/kg
R1BU1S		11/17/2002	Field Sample	118-74-1	Hexachlorobenzene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	7	U	7	ug/kg
R1BU1S		11/17/2002	Field Sample	87-68-3	Hexachlorobutadiene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	340	UJ	340	ug/kg
R1BU1S		11/17/2002	Field Sample	67-72-1	Hexachloroethane	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	7439-89-6	Iron	2600		0.05	mg/kg
R1BU1S		11/17/2002	Field Sample	78-59-1	Isophorone	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	7439-92-1	Lead	1.6		0.005	mg/kg
R1BU1S		11/17/2002	Field Sample	7439-95-4	Magnesium	680		47	mg/kg
R1BU1S		11/17/2002	Field Sample	7439-96-5	Manganese	110		0.01	mg/kg
R1BU1S		11/16/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2100	R	2100	ug/kg
R1BU1S		11/16/2002	Field Sample	93-65-2	MCPP	2100	R	2100	ug/kg
R1BU1S		11/17/2002	Field Sample	7439-97-6	Mercury	0.019	U	0.019	mg/kg
R1BU1S		11/17/2002	Field Sample	72-43-5	Methoxychlor	18	U	18	ug/kg
R1BU1S		11/17/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	15	U	15	ug/kg
R1BU1S		11/17/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	3.4	U	3.4	ug/kg
R1BU1S		11/17/2002	Field Sample	91-20-3	Naphthalene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	7440-02-0	Nickel	4.7		0.04	mg/kg
R1BU1S		11/17/2002	Field Sample	98-95-3	Nitrobenzene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	18	U	18	ug/kg
R1BU1S		11/17/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	10	U	10	ug/kg
R1BU1S		11/17/2002	Field Sample	106-47-8	P-Chloroaniline	690	U	690	ug/kg
R1BU1S		11/17/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	7	U	7	ug/kg
R1BU1S		11/16/2002	Field Sample	87-86-5	Pentachlorophenol	18	R	18	ug/kg
R1BU1S		11/17/2002	Field Sample	PH	pH	7.4		1	units
R1BU1S		11/17/2002	Field Sample	85-01-8	Phenanthrene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	108-95-2	Phenol	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	100-01-6	P-Nitroaniline	1800	U	1800	ug/kg
R1BU1S		11/17/2002	Field Sample	7440-09-7	Potassium	87	J	94	mg/kg
R1BU1S		11/17/2002	Field Sample	129-00-0	Pyrene	340	U	340	ug/kg
R1BU1S		11/17/2002	Field Sample	7782-49-2	Selenium	1	U	1	mg/kg
R1BU1S		11/17/2002	Field Sample	7440-22-4	Silver	1	UJ	1	mg/kg
R1BU1S		11/17/2002	Field Sample	7440-23-5	Sodium	22	J	100	mg/kg
R1BU1S		11/17/2002	Field Sample	100-42-5	Styrene (Monomer)	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	7	U	7	ug/kg
R1BU1S		11/17/2002	Field Sample	127-18-4	Tetrachloroethene	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	7440-28-0	Thallium	1	U	1	mg/kg
R1BU1S		11/17/2002	Field Sample	108-88-3	Toluene	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1BU1S		11/17/2002	Field Sample	8001-35-2	Toxaphene	180	U	180	ug/kg
R1BU1S		11/17/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	3.4	U	3.4	ug/kg
R1BU1S		11/17/2002	Field Sample	79-01-6	Trichloroethylene	3.1	U	3.1	ug/kg
R1BU1S		11/17/2002	Field Sample	7440-62-2	Vanadium	3.1		0.01	mg/kg
R1BU1S		11/17/2002	Field Sample	75-01-4	Vinyl chloride	6.1	U	6.1	ug/kg
R1BU1S		11/17/2002	Field Sample	1330-20-7	Xylenes, Total	3.2	J	11	ug/kg
R1BU1S		11/17/2002	Field Sample	7440-66-6	Zinc	6.7	J	0.02	mg/kg
R1AM1S		11/15/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	75-34-3	1,1-Dichloroethane	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	75-35-4	1,1-Dichloroethylene	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	107-06-2	1,2-Dichloroethane	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	78-87-5	1,2-Dichloropropane	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	93-76-5	2,4,5-T	11	R	11	ug/kg
R1AM1S		11/15/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	11	R	11	ug/kg
R1AM1S		11/15/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	94-75-7	2,4-D	11	R	11	ug/kg
R1AM1S		11/15/2002	Field Sample	94-82-6	2,4-DB	11	R	11	ug/kg
R1AM1S		11/15/2002	Field Sample	120-83-2	2,4-Dichlorophenol	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	105-67-9	2,4-Dimethylphenol	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2300	UJ	2300	ug/kg
R1AM1S		11/15/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	78-93-3	2-Butanone (MEK)	17	U	17	ug/kg
R1AM1S		11/15/2002	Field Sample	91-58-7	2-Chloronaphthalene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	95-57-8	2-Chlorophenol	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	91-57-6	2-Methylnaphthalene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	88-74-4	2-Nitroaniline	2300	UJ	2300	ug/kg
R1AM1S		11/15/2002	Field Sample	88-75-5	2-Nitrophenol	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	880	U	880	ug/kg
R1AM1S		11/15/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	99-09-2	3-Nitroaniline	2300	UJ	2300	ug/kg
R1AM1S		11/15/2002	Field Sample	72-54-8	4,4'-DDD	4.4	UJ	4.4	ug/kg
R1AM1S		11/15/2002	Field Sample	72-55-9	4,4'-DDE	4.4	U	4.4	ug/kg
R1AM1S		11/15/2002	Field Sample	50-29-3	4,4'-DDT	4.4	R	4.4	ug/kg
R1AM1S		11/15/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2300	U	2300	ug/kg
R1AM1S		11/15/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	17	U	17	ug/kg
R1AM1S		11/15/2002	Field Sample	100-02-7	4-Nitrophenol	2300	U	2300	ug/kg
R1AM1S		11/15/2002	Field Sample	83-32-9	Acenaphthene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	208-96-8	Acenaphthylene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	67-64-1	Acetone	98	J	18	ug/kg
R1AM1S		11/15/2002	Field Sample	309-00-2	Aldrin	2.3	U	2.3	ug/kg
R1AM1S		11/15/2002	Field Sample	319-84-6	alpha-BHC	2.3	U	2.3	ug/kg
R1AM1S		11/15/2002	Field Sample	5103-71-9	alpha-Chlordane	2.3	U	2.3	ug/kg
R1AM1S		11/15/2002	Field Sample	7429-90-5	Aluminum	2400		0.02	mg/kg
R1AM1S		11/15/2002	Field Sample	120-12-7	Anthracene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	7440-36-0	Antimony	2.4	UJ	2.4	mg/kg
R1AM1S		11/15/2002	Field Sample	7440-38-2	Arsenic	2.9		0.01	mg/kg
R1AM1S		11/15/2002	Field Sample	7440-39-3	Barium	75		0.94	mg/kg
R1AM1S		11/15/2002	Field Sample	71-43-2	Benzene	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	56-55-3	Benzo(a)anthracene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	50-32-8	Benzo(a)pyrene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	7440-41-7	Beryllium	0.53	U	0.53	mg/kg
R1AM1S		11/15/2002	Field Sample	319-85-7	beta-BHC	2.3	U	2.3	ug/kg
R1AM1S		11/15/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	75-27-4	Bromodichloromethane	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	75-25-2	Bromoform	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	74-83-9	Bromomethane	6.9	UJ	6.9	ug/kg
R1AM1S		11/15/2002	Field Sample	7440-43-9	Cadmium	0.61	UJ	0.61	mg/kg
R1AM1S		11/15/2002	Field Sample	7440-70-2	Calcium	6700		1.1	mg/kg

Appendix II-B1
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1AM1S		11/15/2002	Field Sample	86-74-8	Carbazole	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	75-15-0	Carbon Disulfide	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	56-23-5	Carbon Tetrachloride	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	108-90-7	Chlorobenzene	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	124-48-1	Chlorodibromomethane	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	75-00-3	Chloroethane	6.9	U	6.9	ug/kg
R1AM1S		11/15/2002	Field Sample	67-66-3	Chloroform	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	74-87-3	Chloromethane	6.9	UJ	6.9	ug/kg
R1AM1S		11/15/2002	Field Sample	7440-47-3	Chromium	6.3		0.01	mg/kg
R1AM1S		11/15/2002	Field Sample	218-01-9	Chrysene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	7440-48-4	Cobalt	4.1		0.01	mg/kg
R1AM1S		11/15/2002	Field Sample	7440-50-8	Copper	4.8		0.01	mg/kg
R1AM1S		11/15/2002	Field Sample	75-99-0	Dalapon	2700	R	2700	ug/kg
R1AM1S		11/15/2002	Field Sample	2051-24-3	Decachlorobiphenyl	23	U	23	ug/kg
R1AM1S		11/15/2002	Field Sample	319-86-8	delta-BHC	2.3	U	2.3	ug/kg
R1AM1S		11/15/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	132-64-9	Dibenzofuran	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	1918-00-9	Dicamba	27	R	27	ug/kg
R1AM1S		11/15/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.4	U	4.4	ug/kg
R1AM1S		11/15/2002	Field Sample	75-09-2	Dichloromethane	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	120-36-5	Dichlorprop	130	R	130	ug/kg
R1AM1S		11/15/2002	Field Sample	60-57-1	Dieldrin	4.4	U	4.4	ug/kg
R1AM1S		11/15/2002	Field Sample	84-66-2	Diethyl Phthalate	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	131-11-3	Dimethyl Phthalate	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	84-74-2	Di-n-butylphthalate	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	117-84-0	Di-n-octylphthalate	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	88-85-7	Dinoseb	440	UJ	440	ug/kg
R1AM1S		11/15/2002	Field Sample	959-98-8	Endosulfan I	2.3	U	2.3	ug/kg
R1AM1S		11/15/2002	Field Sample	33213-65-9	Endosulfan II	4.4	U	4.4	ug/kg
R1AM1S		11/15/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.4	U	4.4	ug/kg
R1AM1S		11/15/2002	Field Sample	72-20-8	Endrin	4.4	U	4.4	ug/kg
R1AM1S		11/15/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.4	U	4.4	ug/kg
R1AM1S		11/15/2002	Field Sample	53494-70-5	Endrin Ketone	4.4	UJ	4.4	ug/kg
R1AM1S		11/15/2002	Field Sample	100-41-4	Ethylbenzene	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	206-44-0	Fluoranthene	36	J	10	ug/kg
R1AM1S		11/15/2002	Field Sample	86-73-7	Fluorene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.3	U	2.3	ug/kg
R1AM1S		11/15/2002	Field Sample	5103-74-2	gamma-Chlordane	2.3	U	2.3	ug/kg
R1AM1S		11/15/2002	Field Sample	76-44-8	Heptachlor	2.3	UJ	2.3	ug/kg
R1AM1S		11/15/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.3	U	2.3	ug/kg
R1AM1S		11/15/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	13	U	13	ug/kg
R1AM1S		11/15/2002	Field Sample	118-74-1	Hexachlorobenzene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.9	U	8.9	ug/kg
R1AM1S		11/15/2002	Field Sample	87-68-3	Hexachlorobutadiene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	440	UJ	440	ug/kg
R1AM1S		11/15/2002	Field Sample	67-72-1	Hexachloroethane	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	7439-89-6	Iron	7500		0.05	mg/kg
R1AM1S		11/15/2002	Field Sample	78-59-1	Isophorone	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	7439-92-1	Lead	8.1		0.005	mg/kg
R1AM1S		11/15/2002	Field Sample	7439-95-4	Magnesium	2500		47	mg/kg
R1AM1S		11/15/2002	Field Sample	7439-96-5	Manganese	240		0.01	mg/kg
R1AM1S		11/15/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2700	R	2700	ug/kg
R1AM1S		11/15/2002	Field Sample	93-65-2	MCPP	2700	R	2700	ug/kg
R1AM1S		11/15/2002	Field Sample	7439-97-6	Mercury	0.13		0.017	mg/kg
R1AM1S		11/15/2002	Field Sample	72-43-5	Methoxychlor	23	UJ	23	ug/kg
R1AM1S		11/15/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	17	U	17	ug/kg
R1AM1S		11/15/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	4.4	U	4.4	ug/kg
R1AM1S		11/15/2002	Field Sample	91-20-3	Naphthalene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	7440-02-0	Nickel	8.7		0.04	mg/kg
R1AM1S		11/15/2002	Field Sample	98-95-3	Nitrobenzene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	23	U	23	ug/kg
R1AM1S		11/15/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	13	U	13	ug/kg
R1AM1S		11/15/2002	Field Sample	106-47-8	P-Chloroaniline	880	U	880	ug/kg
R1AM1S		11/15/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.9	U	8.9	ug/kg
R1AM1S		11/15/2002	Field Sample	87-86-5	Pentachlorophenol	23	R	23	ug/kg
R1AM1S		11/15/2002	Field Sample	PH	pH	7.3		1	units
R1AM1S		11/15/2002	Field Sample	85-01-8	Phenanthrene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	108-95-2	Phenol	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	100-01-6	P-Nitroaniline	2300	U	2300	ug/kg
R1AM1S		11/15/2002	Field Sample	7440-09-7	Potassium	440		94	mg/kg
R1AM1S		11/15/2002	Field Sample	129-00-0	Pyrene	440	U	440	ug/kg
R1AM1S		11/15/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R1AM1S		11/15/2002	Field Sample	7440-22-4	Silver	1.2	UJ	1.2	mg/kg
R1AM1S		11/15/2002	Field Sample	7440-23-5	Sodium	57	J	100	mg/kg
R1AM1S		11/15/2002	Field Sample	100-42-5	Styrene (Monomer)	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.9	U	8.9	ug/kg

Appendix II-B1
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1AM1S		11/15/2002	Field Sample	127-18-4	Tetrachloroethene	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	7440-28-0	Thallium	1.2	U	1.2	mg/kg
R1AM1S		11/15/2002	Field Sample	108-88-3	Toluene	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	E-10195	Total Organic Carbon	2700		500	mg/kg
R1AM1S		11/15/2002	Field Sample	8001-35-2	Toxaphene	230	U	230	ug/kg
R1AM1S		11/15/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.4	U	4.4	ug/kg
R1AM1S		11/15/2002	Field Sample	79-01-6	Trichloroethylene	3.4	U	3.4	ug/kg
R1AM1S		11/15/2002	Field Sample	7440-62-2	Vanadium	9.2		0.01	mg/kg
R1AM1S		11/15/2002	Field Sample	75-01-4	Vinyl chloride	6.9	U	6.9	ug/kg
R1AM1S		11/15/2002	Field Sample	1330-20-7	Xylenes, Total	6.9	U	6.9	ug/kg
R1AM1S		11/15/2002	Field Sample	7440-66-6	Zinc	34	J	0.02	mg/kg
R1BM1S		11/16/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.0011	U	0.0011	ug/kg
R1BM1S		11/16/2002	Field Sample	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.00091	U	0.00091	ug/kg
R1BM1S		11/16/2002	Field Sample	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.001	U	0.001	ug/kg
R1BM1S		11/16/2002	Field Sample	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.0012	U	0.0012	ug/kg
R1BM1S		11/16/2002	Field Sample	70648-26-9	1,2,3,4,7,8-HxCDF	0.0011	U	0.0011	ug/kg
R1BM1S		11/16/2002	Field Sample	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.0013	U	0.0013	ug/kg
R1BM1S		11/16/2002	Field Sample	57117-44-9	1,2,3,6,7,8-HxCDF	0.0011	U	0.0011	ug/kg
R1BM1S		11/16/2002	Field Sample	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.0012	U	0.0012	ug/kg
R1BM1S		11/16/2002	Field Sample	72918-21-9	1,2,3,7,8,9-HxCDF	0.0014	U	0.0014	ug/kg
R1BM1S		11/16/2002	Field Sample	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	0.00084	U	0.00084	ug/kg
R1BM1S		11/16/2002	Field Sample	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.0017	U	0.0017	ug/kg
R1BM1S		11/16/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	60851-34-5	2,3,4,6,7,8-HxCDF	0.0012	U	0.0012	ug/kg
R1BM1S		11/16/2002	Field Sample	57117-31-4	2,3,4,7,8-PeCDF	0.00083	U	0.00083	ug/kg
R1BM1S		11/16/2002	Field Sample	1746-01-6	2,3,7,8-TCDD	0.00059	U	0.00059	ug/kg
R1BM1S		11/16/2002	Field Sample	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	0.00051	U	0.00051	ug/kg
R1BM1S		11/16/2002	Field Sample	93-76-5	2,4,5-T	8.6	R	8.6	ug/kg
R1BM1S		11/16/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	8.6	R	8.6	ug/kg
R1BM1S		11/16/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	94-75-7	2,4-D	5.2	J	0.5	ug/kg
R1BM1S		11/16/2002	Field Sample	94-82-6	2,4-DB	8.6	R	8.6	ug/kg
R1BM1S		11/16/2002	Field Sample	120-83-2	2,4-Dichlorophenol	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	105-67-9	2,4-Dimethylphenol	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	51-28-5	2,4-Dinitrophenol	1800	UJ	1800	ug/kg
R1BM1S		11/16/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	78-93-3	2-Butanone (MEK)	12	U	12	ug/kg
R1BM1S		11/16/2002	Field Sample	91-58-7	2-Chloronaphthalene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	95-57-8	2-Chlorophenol	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	91-57-6	2-Methylnaphthalene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	88-74-4	2-Nitroaniline	1800	UJ	1800	ug/kg
R1BM1S		11/16/2002	Field Sample	88-75-5	2-Nitrophenol	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	690	U	690	ug/kg
R1BM1S		11/16/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	99-09-2	3-Nitroaniline	1800	UJ	1800	ug/kg
R1BM1S		11/16/2002	Field Sample	72-54-8	4,4'-DDD	3.4	U	3.4	ug/kg
R1BM1S		11/16/2002	Field Sample	72-55-9	4,4'-DDE	3.4	U	3.4	ug/kg
R1BM1S		11/16/2002	Field Sample	50-29-3	4,4'-DDT	3.4	U	3.4	ug/kg
R1BM1S		11/16/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	1800	U	1800	ug/kg
R1BM1S		11/16/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	12	ug/kg
R1BM1S		11/16/2002	Field Sample	100-02-7	4-Nitrophenol	1800	U	1800	ug/kg
R1BM1S		11/16/2002	Field Sample	83-32-9	Acenaphthene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	208-96-8	Acenaphthylene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	67-64-1	Acetone	3.4	J	18	ug/kg
R1BM1S		11/16/2002	Field Sample	309-00-2	Aldrin	1.8	U	1.8	ug/kg
R1BM1S		11/16/2002	Field Sample	319-84-6	alpha-BHC	1.8	U	1.8	ug/kg
R1BM1S		11/16/2002	Field Sample	5103-71-9	alpha-Chlordane	1.8	U	1.8	ug/kg
R1BM1S		11/16/2002	Field Sample	7429-90-5	Aluminum	940		0.02	mg/kg
R1BM1S		11/16/2002	Field Sample	120-12-7	Anthracene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	7440-36-0	Antimony	2.1	U	2.1	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM1S		11/16/2002	Field Sample	7440-38-2	Arsenic	1.5	J	0.01	mg/kg
R1BM1S		11/16/2002	Field Sample	7440-39-3	Barium	16		0.94	mg/kg
R1BM1S		11/16/2002	Field Sample	71-43-2	Benzene	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	56-55-3	Benzo(a)anthracene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	50-32-8	Benzo(a)pyrene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	7440-41-7	Beryllium	0.42	U	0.42	mg/kg
R1BM1S		11/16/2002	Field Sample	319-85-7	beta-BHC	1.8	U	1.8	ug/kg
R1BM1S		11/16/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	75-27-4	Bromodichloromethane	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	75-25-2	Bromoform	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	74-83-9	Bromomethane	4.9	UJ	4.9	ug/kg
R1BM1S		11/16/2002	Field Sample	7440-43-9	Cadmium	0.47	UJ	0.47	mg/kg
R1BM1S		11/16/2002	Field Sample	7440-70-2	Calcium	1400		1.1	mg/kg
R1BM1S		11/16/2002	Field Sample	86-74-8	Carbazole	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	75-15-0	Carbon Disulfide	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	108-90-7	Chlorobenzene	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	124-48-1	Chlorodibromomethane	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	75-00-3	Chloroethane	4.9	U	4.9	ug/kg
R1BM1S		11/16/2002	Field Sample	67-66-3	Chloroform	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	74-87-3	Chloromethane	4.9	UJ	4.9	ug/kg
R1BM1S		11/16/2002	Field Sample	7440-47-3	Chromium	3.5		0.01	mg/kg
R1BM1S		11/16/2002	Field Sample	218-01-9	Chrysene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	7440-48-4	Cobalt	2.5		0.01	mg/kg
R1BM1S		11/16/2002	Field Sample	7440-50-8	Copper	1.1	J	0.01	mg/kg
R1BM1S		11/16/2002	Field Sample	75-99-0	Dalapon	2100	R	2100	ug/kg
R1BM1S		11/16/2002	Field Sample	2051-24-3	Decachlorobiphenyl	18	U	18	ug/kg
R1BM1S		11/16/2002	Field Sample	319-86-8	delta-BHC	1.8	U	1.8	ug/kg
R1BM1S		11/16/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	132-64-9	Dibenzofuran	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	1918-00-9	Dicamba	21	R	21	ug/kg
R1BM1S		11/16/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	3.4	U	3.4	ug/kg
R1BM1S		11/16/2002	Field Sample	75-09-2	Dichloromethane	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	120-36-5	Dichlorprop	21	J	100	ug/kg
R1BM1S		11/16/2002	Field Sample	60-57-1	Dieldrin	3.4	U	3.4	ug/kg
R1BM1S		11/16/2002	Field Sample	84-66-2	Diethyl Phthalate	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	131-11-3	Dimethyl Phthalate	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	84-74-2	Di-n-butylphthalate	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	117-84-0	Di-n-octylphthalate	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	88-85-7	Dinoseb	340	UJ	340	ug/kg
R1BM1S		11/16/2002	Field Sample	959-98-8	Endosulfan I	1.8	U	1.8	ug/kg
R1BM1S		11/16/2002	Field Sample	33213-65-9	Endosulfan II	3.4	U	3.4	ug/kg
R1BM1S		11/16/2002	Field Sample	1031-07-8	Endosulfan Sulfate	3.4	U	3.4	ug/kg
R1BM1S		11/16/2002	Field Sample	72-20-8	Endrin	3.4	U	3.4	ug/kg
R1BM1S		11/16/2002	Field Sample	7421-93-4	Endrin Aldehyde	3.4	U	3.4	ug/kg
R1BM1S		11/16/2002	Field Sample	53494-70-5	Endrin Ketone	3.4	U	3.4	ug/kg
R1BM1S		11/16/2002	Field Sample	100-41-4	Ethylbenzene	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	206-44-0	Fluoranthene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	86-73-7	Fluorene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	1.8	U	1.8	ug/kg
R1BM1S		11/16/2002	Field Sample	5103-74-2	gamma-Chlordane	1.8	U	1.8	ug/kg
R1BM1S		11/16/2002	Field Sample	76-44-8	Heptachlor	1.8	U	1.8	ug/kg
R1BM1S		11/16/2002	Field Sample	1024-57-3	Heptachlor Epoxide	1.8	U	1.8	ug/kg
R1BM1S		11/16/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	10	U	10	ug/kg
R1BM1S		11/16/2002	Field Sample	118-74-1	Hexachlorobenzene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	7	U	7	ug/kg
R1BM1S		11/16/2002	Field Sample	87-68-3	Hexachlorobutadiene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	340	UJ	340	ug/kg
R1BM1S		11/16/2002	Field Sample	67-72-1	Hexachloroethane	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	7439-89-6	Iron	3300		0.05	mg/kg
R1BM1S		11/16/2002	Field Sample	78-59-1	Isophorone	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	7439-92-1	Lead	1.7		0.005	mg/kg
R1BM1S		11/16/2002	Field Sample	7439-95-4	Magnesium	700		47	mg/kg
R1BM1S		11/16/2002	Field Sample	7439-96-5	Manganese	150		0.01	mg/kg
R1BM1S		11/16/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2100	R	2100	ug/kg
R1BM1S		11/16/2002	Field Sample	93-65-2	MCPP	460	J	120	ug/kg
R1BM1S		11/16/2002	Field Sample	7439-97-6	Mercury	0.0035	J	0.017	mg/kg
R1BM1S		11/16/2002	Field Sample	72-43-5	Methoxychlor	18	U	18	ug/kg
R1BM1S		11/16/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	12	U	12	ug/kg
R1BM1S		11/16/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	3.4	U	3.4	ug/kg
R1BM1S		11/16/2002	Field Sample	91-20-3	Naphthalene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	7440-02-0	Nickel	6		0.04	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM1S		11/16/2002	Field Sample	98-95-3	Nitrobenzene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	18	U	18	ug/kg
R1BM1S		11/16/2002	Field Sample	3268-87-9	OCDD	0.012	J	0.000033	ug/kg
R1BM1S		11/16/2002	Field Sample	39001-02-0	OCDF	0.0013	U	0.0013	ug/kg
R1BM1S		11/16/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	10	U	10	ug/kg
R1BM1S		11/16/2002	Field Sample	106-47-8	P-Chloroaniline	690	U	690	ug/kg
R1BM1S		11/16/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	7	U	7	ug/kg
R1BM1S		11/16/2002	Field Sample	87-86-5	Pentachlorophenol	18	R	18	ug/kg
R1BM1S		11/16/2002	Field Sample	MOIST	Percent Moisture	3.4		1	%
R1BM1S		11/16/2002	Field Sample	PH	pH	7.3		1	units
R1BM1S		11/16/2002	Field Sample	85-01-8	Phenanthrene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	108-95-2	Phenol	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	100-01-6	P-Nitroaniline	1800	U	1800	ug/kg
R1BM1S		11/16/2002	Field Sample	7440-09-7	Potassium	100		94	mg/kg
R1BM1S		11/16/2002	Field Sample	129-00-0	Pyrene	340	U	340	ug/kg
R1BM1S		11/16/2002	Field Sample	7782-49-2	Selenium	0.95	U	0.95	mg/kg
R1BM1S		11/16/2002	Field Sample	7440-22-4	Silver	0.95	UJ	0.95	mg/kg
R1BM1S		11/16/2002	Field Sample	7440-23-5	Sodium	26	J	100	mg/kg
R1BM1S		11/16/2002	Field Sample	100-42-5	Styrene (Monomer)	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	7	U	7	ug/kg
R1BM1S		11/16/2002	Field Sample	127-18-4	Tetrachloroethene	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	7440-28-0	Thallium	0.95	U	0.95	mg/kg
R1BM1S		11/16/2002	Field Sample	108-88-3	Toluene	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	37871-00-4	Total HpCDD	0.0011	U	0.0011	ug/kg
R1BM1S		11/16/2002	Field Sample	38998-75-3	Total HpCDF	0.001	U	0.001	ug/kg
R1BM1S		11/16/2002	Field Sample	34465-46-8	Total HxCDD	0.0013	U	0.0013	ug/kg
R1BM1S		11/16/2002	Field Sample	55684-94-1	Total HxCDF	0.0014	U	0.0014	ug/kg
R1BM1S		11/16/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R1BM1S		11/16/2002	Field Sample	36088-22-9	Total PeCDD	0.0017	U	0.0017	ug/kg
R1BM1S		11/16/2002	Field Sample	30402-15-4	Total PeCDF	0.00087	U	0.00087	ug/kg
R1BM1S		11/16/2002	Field Sample	41903-57-5	Total TCDD	0.00059	U	0.00059	ug/kg
R1BM1S		11/16/2002	Field Sample	55722-27-5	Total TCDF	0.00051	U	0.00051	ug/kg
R1BM1S		11/16/2002	Field Sample	8001-35-2	Toxaphene	180	U	180	ug/kg
R1BM1S		11/16/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	3.4	U	3.4	ug/kg
R1BM1S		11/16/2002	Field Sample	79-01-6	Trichloroethylene	2.4	U	2.4	ug/kg
R1BM1S		11/16/2002	Field Sample	7440-62-2	Vanadium	3.6		0.01	mg/kg
R1BM1S		11/16/2002	Field Sample	75-01-4	Vinyl chloride	4.9	U	4.9	ug/kg
R1BM1S		11/16/2002	Field Sample	1330-20-7	Xylenes, Total	6.5	U	6.5	ug/kg
R1BM1S		11/16/2002	Field Sample	7440-66-6	Zinc	8.2	J	0.02	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	75-34-3	1,1-Dichloroethane	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	75-35-4	1,1-Dichloroethylene	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.0024	U	0.0024	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.00039	U	0.00039	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.00042	U	0.00042	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.00062	U	0.00062	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	70648-26-9	1,2,3,4,7,8-HxCDF	0.00052	U	0.00052	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.00066	U	0.00066	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	57117-44-9	1,2,3,6,7,8-HxCDF	0.00051	U	0.00051	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.00063	U	0.00063	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	72918-21-9	1,2,3,7,8,9-HxCDF	0.00066	U	0.00066	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	0.00042	U	0.00042	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.00078	U	0.00078	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	120-82-1	1,2,4-Trichlorobenzene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	95-50-1	1,2-Dichlorobenzene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	107-06-2	1,2-Dichloroethane	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	540-59-0	1,2-Dichloroethene (total)	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	78-87-5	1,2-Dichloropropane	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	541-73-1	1,3-Dichlorobenzene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	106-46-7	1,4-Dichlorobenzene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	60851-34-5	2,3,4,6,7,8-HxCDF	0.00057	U	0.00057	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	57117-31-4	2,3,4,7,8-PeCDF	0.00041	U	0.00041	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	1746-01-6	2,3,7,8-TCDD	0.00038	U	0.00038	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	0.00031	U	0.00031	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	93-76-5	2,4,5-T	8.6	R	8.6	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	93-72-1	2,4,5-TP (Silvex)	8.6	R	8.6	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	95-95-4	2,4,5-Trichlorophenol	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	88-06-2	2,4,6-Trichlorophenol	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	94-75-7	2,4-D	8.6	R	8.6	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	94-82-6	2,4-DB	8.6	R	8.6	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	120-83-2	2,4-Dichlorophenol	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	105-67-9	2,4-Dimethylphenol	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	51-28-5	2,4-Dinitrophenol	1800	UJ	1800	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	121-14-2	2,4-Dinitrotoluene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	606-20-2	2,6-Dinitrotoluene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	78-93-3	2-Butanone (MEK)	13	U	13	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	91-58-7	2-Chloronaphthalene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	95-57-8	2-Chlorophenol	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	91-57-6	2-Methylnaphthalene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	95-48-7	2-Methylphenol (o-Cresol)	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	88-74-4	2-Nitroaniline	1800	UJ	1800	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	88-75-5	2-Nitrophenol	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	91-94-1	3,3'-Dichlorobenzidine	690	U	690	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	99-09-2	3-Nitroaniline	1800	UJ	1800	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	72-54-8	4,4'-DDD	3.4	U	3.4	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	72-55-9	4,4'-DDE	3.4	U	3.4	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	50-29-3	4,4'-DDT	3.4	U	3.4	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	534-52-1	4,6-Dinitro-2-methylphenol	1800	U	1800	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	101-55-3	4-Bromophenyl Phenyl Ether	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	59-50-7	4-Chloro-3-methylphenol	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7005-72-3	4-Chlorophenyl Phenyl Ether	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	13	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	100-02-7	4-Nitrophenol	1800	U	1800	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	83-32-9	Acenaphthene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	208-96-8	Acenaphthylene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	67-64-1	Acetone	8.1	J	18	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	309-00-2	Aldrin	1.8	U	1.8	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	319-84-6	alpha-BHC	1.8	U	1.8	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	5103-71-9	alpha-Chlordane	1.8	U	1.8	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7429-90-5	Aluminum	870		0.02	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	120-12-7	Anthracene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-36-0	Antimony	2.1	U	2.1	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-38-2	Arsenic	1.1	J	0.01	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-39-3	Barium	12		0.94	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	71-43-2	Benzene	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	56-55-3	Benzo(a)anthracene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	50-32-8	Benzo(a)pyrene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	205-99-2	Benzo(b)fluoranthene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	191-24-2	Benzo(g,h,i)perylene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	207-08-9	Benzo(k)fluoranthene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	85-68-7	Benzyl Butyl Phthalate	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-41-7	Beryllium	0.42	U	0.42	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	319-85-7	beta-BHC	1.8	U	1.8	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	111-91-1	bis(2-Chloroethoxy)methane	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	111-44-4	bis(2-Chloroethyl)ether	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	117-81-7	bis(2-Ethylhexyl)phthalate	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	75-27-4	Bromodichloromethane	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	75-25-2	Bromoform	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	74-83-9	Bromomethane	5	UJ	5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-43-9	Cadmium	0.47	UJ	0.47	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-70-2	Calcium	700		1.1	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	86-74-8	Carbazole	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	75-15-0	Carbon Disulfide	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	56-23-5	Carbon Tetrachloride	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	108-90-7	Chlorobenzene	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	124-48-1	Chlorodibromomethane	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	75-00-3	Chloroethane	5	U	5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	67-66-3	Chloroform	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	74-87-3	Chloromethane	5	UJ	5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-47-3	Chromium	3.3		0.01	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	218-01-9	Chrysene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-48-4	Cobalt	2.3		0.01	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-50-8	Copper	1.3	J	0.01	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	75-99-0	Dalapon	2100	R	2100	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	2051-24-3	Decachlorobiphenyl	18	U	18	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	319-86-8	delta-BHC	1.8	U	1.8	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	53-70-3	Dibenzo(a,h)anthracene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	132-64-9	Dibenzofuran	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	1918-00-9	Dicamba	21	R	21	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	C-DICHLOROBI	Dichlorobiphenyl	3.4	U	3.4	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	75-09-2	Dichloromethane	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	120-36-5	Dichlorprop	19	J	100	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	60-57-1	Dieldrin	3.4	U	3.4	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	84-66-2	Diethyl Phthalate	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	131-11-3	Dimethyl Phthalate	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	84-74-2	Di-n-butylphthalate	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	117-84-0	Di-n-octylphthalate	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	88-85-7	Dinoseb	340	UJ	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	959-98-8	Endosulfan I	1.8	U	1.8	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	33213-65-9	Endosulfan II	3.4	U	3.4	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	1031-07-8	Endosulfan Sulfate	3.4	U	3.4	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	72-20-8	Endrin	3.4	U	3.4	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7421-93-4	Endrin Aldehyde	3.4	U	3.4	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	53494-70-5	Endrin Ketone	3.4	U	3.4	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	100-41-4	Ethylbenzene	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	206-44-0	Fluoranthene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	86-73-7	Fluorene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	58-89-9	gamma-BHC (Lindane)	1.8	U	1.8	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	5103-74-2	gamma-Chlordane	1.8	U	1.8	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	76-44-8	Heptachlor	1.8	U	1.8	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	1024-57-3	Heptachlor Epoxide	1.8	U	1.8	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	C-HEPTACHLOR	Heptachlorobiphenyl	10	U	10	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	118-74-1	Hexachlorobenzene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	C-HEXACHLORO	Hexachlorobiphenyl	7	U	7	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	87-68-3	Hexachlorobutadiene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	77-47-4	Hexachlorocyclopentadiene	340	UJ	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	67-72-1	Hexachloroethane	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	193-39-5	Indeno(1,2,3-cd)pyrene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7439-89-6	Iron	3100		0.05	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	78-59-1	Isophorone	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7439-92-1	Lead	1.7		0.005	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7439-95-4	Magnesium	500		47	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7439-96-5	Manganese	160		0.01	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2100	R	2100	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	93-65-2	MCPP	2100	R	2100	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7439-97-6	Mercury	0.017	U	0.017	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	72-43-5	Methoxychlor	18	U	18	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	591-78-6	Methyl N-Butyl Ketone	13	U	13	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	C-MONOCHLOR(	Monochlorobiphenyl	3.4	U	3.4	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	91-20-3	Naphthalene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-02-0	Nickel	5		0.04	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	98-95-3	Nitrobenzene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	621-64-7	N-Nitroso-di-n-propylamine	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	86-30-6	N-Nitrosodiphenylamine	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	C-NONACHLORO	Nonachlorobiphenyl	18	U	18	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	3268-87-9	OCDD	0.035	J	0.000033	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	39001-02-0	OCDF	0.0006	U	0.0006	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	C-OCTA-BIPHE	Octachlorobiphenyl	10	U	10	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	106-47-8	P-Chloroaniline	690	U	690	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	C-PENTBIPHEN	Pentachlorobiphenyl	7	U	7	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	87-86-5	Pentachlorophenol	18	R	18	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	MOIST	Percent Moisture	3.1		1	%
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	PH	pH	7.3		1	units
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	85-01-8	Phenanthrene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	108-95-2	Phenol	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	100-01-6	P-Nitroaniline	1800	U	1800	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-09-7	Potassium	89	J	94	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	129-00-0	Pyrene	340	U	340	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7782-49-2	Selenium	0.95	U	0.95	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-22-4	Silver	0.95	UJ	0.95	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-23-5	Sodium	25	J	100	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	100-42-5	Styrene (Monomer)	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	C-TETRACHLOR	Tetrachlorobiphenyl	7	U	7	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	127-18-4	Tetrachloroethene	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-28-0	Thallium	0.95	U	0.95	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	108-88-3	Toluene	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	37871-00-4	Total HpCDD	0.0027		0.0011	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	38998-75-3	Total HpCDF	0.00042	U	0.00042	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	34465-46-8	Total HxCDD	0.00066	U	0.00066	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	55684-94-1	Total HxCDF	0.00066	U	0.00066	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	E-10195	Total Organic Carbon	500	U	500	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	36088-22-9	Total PeCDD	0.00078	U	0.00078	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	30402-15-4	Total PeCDF	0.00049	U	0.00049	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	41903-57-5	Total TCDD	0.00038	U	0.00038	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	55722-27-5	Total TCDF	0.00031	U	0.00031	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	8001-35-2	Toxaphene	180	U	180	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	10061-02-6	trans-1,3-Dichloropropene	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	C-TRICHLOROB	Trichlorobiphenyl	3.4	U	3.4	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	79-01-6	Trichloroethylene	2.5	U	2.5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-62-2	Vanadium	3.2		0.01	mg/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	75-01-4	Vinyl chloride	5	U	5	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	1330-20-7	Xylenes, Total	5.8	U	5.8	ug/kg
R1BM2S	R1BM1S	11/16/2002	Field Duplicate	7440-66-6	Zinc	7.2	J	0.02	mg/kg
R1CM1S		11/16/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.4	U	2.4	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1CM1S		11/16/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	93-76-5	2,4,5-T	8.8	R	8.8	ug/kg
R1CM1S		11/16/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	8.8	R	8.8	ug/kg
R1CM1S		11/16/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	94-75-7	2,4-D	8.8	R	8.8	ug/kg
R1CM1S		11/16/2002	Field Sample	94-82-6	2,4-DB	8.8	R	8.8	ug/kg
R1CM1S		11/16/2002	Field Sample	120-83-2	2,4-Dichlorophenol	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	105-67-9	2,4-Dimethylphenol	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	51-28-5	2,4-Dinitrophenol	1800	UJ	1800	ug/kg
R1CM1S		11/16/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	78-93-3	2-Butanone (MEK)	12	U	12	ug/kg
R1CM1S		11/16/2002	Field Sample	91-58-7	2-Chloronaphthalene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	95-57-8	2-Chlorophenol	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	91-57-6	2-Methylnaphthalene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	88-74-4	2-Nitroaniline	1800	UJ	1800	ug/kg
R1CM1S		11/16/2002	Field Sample	88-75-5	2-Nitrophenol	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	700	U	700	ug/kg
R1CM1S		11/16/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	99-09-2	3-Nitroaniline	1800	UJ	1800	ug/kg
R1CM1S		11/16/2002	Field Sample	72-54-8	4,4'-DDD	3.5	U	3.5	ug/kg
R1CM1S		11/16/2002	Field Sample	72-55-9	4,4'-DDE	3.5	U	3.5	ug/kg
R1CM1S		11/16/2002	Field Sample	50-29-3	4,4'-DDT	3.5	U	3.5	ug/kg
R1CM1S		11/16/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	1800	U	1800	ug/kg
R1CM1S		11/16/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	12	ug/kg
R1CM1S		11/16/2002	Field Sample	100-02-7	4-Nitrophenol	1800	U	1800	ug/kg
R1CM1S		11/16/2002	Field Sample	83-32-9	Acenaphthene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	208-96-8	Acenaphthylene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	67-64-1	Acetone	9.3	J	18	ug/kg
R1CM1S		11/16/2002	Field Sample	309-00-2	Aldrin	1.8	U	1.8	ug/kg
R1CM1S		11/16/2002	Field Sample	319-84-6	alpha-BHC	1.8	U	1.8	ug/kg
R1CM1S		11/16/2002	Field Sample	5103-71-9	alpha-Chlordane	1.8	U	1.8	ug/kg
R1CM1S		11/16/2002	Field Sample	7429-90-5	Aluminum	800		0.02	mg/kg
R1CM1S		11/16/2002	Field Sample	120-12-7	Anthracene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	7440-36-0	Antimony	2.1	U	2.1	mg/kg
R1CM1S		11/16/2002	Field Sample	7440-38-2	Arsenic	1	J	0.01	mg/kg
R1CM1S		11/16/2002	Field Sample	7440-39-3	Barium	14		0.94	mg/kg
R1CM1S		11/16/2002	Field Sample	71-43-2	Benzene	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	56-55-3	Benzo(a)anthracene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	50-32-8	Benzo(a)pyrene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	7440-41-7	Beryllium	0.42	U	0.42	mg/kg
R1CM1S		11/16/2002	Field Sample	319-85-7	beta-BHC	1.8	U	1.8	ug/kg
R1CM1S		11/16/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	75-27-4	Bromodichloromethane	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	75-25-2	Bromoform	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	74-83-9	Bromomethane	4.8	UJ	4.8	ug/kg
R1CM1S		11/16/2002	Field Sample	7440-43-9	Cadmium	0.53	UJ	0.53	mg/kg
R1CM1S		11/16/2002	Field Sample	7440-70-2	Calcium	960		1.1	mg/kg
R1CM1S		11/16/2002	Field Sample	86-74-8	Carbazole	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	75-15-0	Carbon Disulfide	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	108-90-7	Chlorobenzene	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	124-48-1	Chlorodibromomethane	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	75-00-3	Chloroethane	4.8	U	4.8	ug/kg
R1CM1S		11/16/2002	Field Sample	67-66-3	Chloroform	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	74-87-3	Chloromethane	4.8	UJ	4.8	ug/kg
R1CM1S		11/16/2002	Field Sample	7440-47-3	Chromium	3.3		0.01	mg/kg
R1CM1S		11/16/2002	Field Sample	218-01-9	Chrysene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	7440-48-4	Cobalt	2.4		0.01	mg/kg
R1CM1S		11/16/2002	Field Sample	7440-50-8	Copper	0.61	J	0.01	mg/kg
R1CM1S		11/16/2002	Field Sample	75-99-0	Dalapon	2100	R	2100	ug/kg
R1CM1S		11/16/2002	Field Sample	2051-24-3	Decachlorobiphenyl	18	U	18	ug/kg
R1CM1S		11/16/2002	Field Sample	319-86-8	delta-BHC	1.8	U	1.8	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1CM1S		11/16/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	132-64-9	Dibenzofuran	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	1918-00-9	Dicamba	21	R	21	ug/kg
R1CM1S		11/16/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	3.5	U	3.5	ug/kg
R1CM1S		11/16/2002	Field Sample	75-09-2	Dichloromethane	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	120-36-5	Dichlorprop	15	J	100	ug/kg
R1CM1S		11/16/2002	Field Sample	60-57-1	Dieldrin	3.5	U	3.5	ug/kg
R1CM1S		11/16/2002	Field Sample	84-66-2	Diethyl Phthalate	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	131-11-3	Dimethyl Phthalate	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	84-74-2	Di-n-butylphthalate	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	117-84-0	Di-n-octylphthalate	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	88-85-7	Dinoseb	350	UJ	350	ug/kg
R1CM1S		11/16/2002	Field Sample	959-98-8	Endosulfan I	1.8	U	1.8	ug/kg
R1CM1S		11/16/2002	Field Sample	33213-65-9	Endosulfan II	3.5	U	3.5	ug/kg
R1CM1S		11/16/2002	Field Sample	1031-07-8	Endosulfan Sulfate	3.5	U	3.5	ug/kg
R1CM1S		11/16/2002	Field Sample	72-20-8	Endrin	3.5	U	3.5	ug/kg
R1CM1S		11/16/2002	Field Sample	7421-93-4	Endrin Aldehyde	3.5	U	3.5	ug/kg
R1CM1S		11/16/2002	Field Sample	53494-70-5	Endrin Ketone	3.5	U	3.5	ug/kg
R1CM1S		11/16/2002	Field Sample	100-41-4	Ethylbenzene	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	206-44-0	Fluoranthene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	86-73-7	Fluorene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	1.8	U	1.8	ug/kg
R1CM1S		11/16/2002	Field Sample	5103-74-2	gamma-Chlordane	1.8	U	1.8	ug/kg
R1CM1S		11/16/2002	Field Sample	76-44-8	Heptachlor	1.8	U	1.8	ug/kg
R1CM1S		11/16/2002	Field Sample	1024-57-3	Heptachlor Epoxide	1.8	U	1.8	ug/kg
R1CM1S		11/16/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	11	U	11	ug/kg
R1CM1S		11/16/2002	Field Sample	118-74-1	Hexachlorobenzene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	7.1	U	7.1	ug/kg
R1CM1S		11/16/2002	Field Sample	87-68-3	Hexachlorobutadiene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	350	UJ	350	ug/kg
R1CM1S		11/16/2002	Field Sample	67-72-1	Hexachloroethane	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	7439-89-6	Iron	3300		0.05	mg/kg
R1CM1S		11/16/2002	Field Sample	78-59-1	Isophorone	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	7439-92-1	Lead	2.1		0.005	mg/kg
R1CM1S		11/16/2002	Field Sample	7439-95-4	Magnesium	710		47	mg/kg
R1CM1S		11/16/2002	Field Sample	7439-96-5	Manganese	95		0.01	mg/kg
R1CM1S		11/16/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2100	R	2100	ug/kg
R1CM1S		11/16/2002	Field Sample	93-65-2	MCPP	2100	R	2100	ug/kg
R1CM1S		11/16/2002	Field Sample	7439-97-6	Mercury	0.018	U	0.018	mg/kg
R1CM1S		11/16/2002	Field Sample	72-43-5	Methoxychlor	18	U	18	ug/kg
R1CM1S		11/16/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	12	U	12	ug/kg
R1CM1S		11/16/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	3.5	U	3.5	ug/kg
R1CM1S		11/16/2002	Field Sample	91-20-3	Naphthalene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	7440-02-0	Nickel	5.2		0.04	mg/kg
R1CM1S		11/16/2002	Field Sample	98-95-3	Nitrobenzene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	18	U	18	ug/kg
R1CM1S		11/16/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	11	U	11	ug/kg
R1CM1S		11/16/2002	Field Sample	106-47-8	P-Chloroaniline	700	U	700	ug/kg
R1CM1S		11/16/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	7.1	U	7.1	ug/kg
R1CM1S		11/16/2002	Field Sample	87-86-5	Pentachlorophenol	18	R	18	ug/kg
R1CM1S		11/16/2002	Field Sample	PH	pH	7.3		1	units
R1CM1S		11/16/2002	Field Sample	85-01-8	Phenanthrene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	108-95-2	Phenol	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	100-01-6	P-Nitroaniline	1800	U	1800	ug/kg
R1CM1S		11/16/2002	Field Sample	7440-09-7	Potassium	130		94	mg/kg
R1CM1S		11/16/2002	Field Sample	129-00-0	Pyrene	350	U	350	ug/kg
R1CM1S		11/16/2002	Field Sample	7782-49-2	Selenium	1.1	U	1.1	mg/kg
R1CM1S		11/16/2002	Field Sample	7440-22-4	Silver	1.1	UJ	1.1	mg/kg
R1CM1S		11/16/2002	Field Sample	7440-23-5	Sodium	33	J	100	mg/kg
R1CM1S		11/16/2002	Field Sample	100-42-5	Styrene (Monomer)	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	7.1	U	7.1	ug/kg
R1CM1S		11/16/2002	Field Sample	127-18-4	Tetrachloroethene	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	7440-28-0	Thallium	1.1	U	1.1	mg/kg
R1CM1S		11/16/2002	Field Sample	108-88-3	Toluene	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R1CM1S		11/16/2002	Field Sample	8001-35-2	Toxaphene	180	U	180	ug/kg
R1CM1S		11/16/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	3.5	U	3.5	ug/kg
R1CM1S		11/16/2002	Field Sample	79-01-6	Trichloroethylene	2.4	U	2.4	ug/kg
R1CM1S		11/16/2002	Field Sample	7440-62-2	Vanadium	3.3		0.01	mg/kg
R1CM1S		11/16/2002	Field Sample	75-01-4	Vinyl chloride	4.8	U	4.8	ug/kg
R1CM1S		11/16/2002	Field Sample	1330-20-7	Xylenes, Total	4.8	U	4.8	ug/kg
R1CM1S		11/16/2002	Field Sample	7440-66-6	Zinc	7.6	J	0.02	mg/kg
R1AD1S		11/15/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.9	U	2.9	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1AD1S		11/15/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	93-76-5	2,4,5-T	12	R	12	ug/kg
R1AD1S		11/15/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	12	R	12	ug/kg
R1AD1S		11/15/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	94-75-7	2,4-D	12	R	12	ug/kg
R1AD1S		11/15/2002	Field Sample	94-82-6	2,4-DB	12	R	12	ug/kg
R1AD1S		11/15/2002	Field Sample	120-83-2	2,4-Dichlorophenol	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	105-67-9	2,4-Dimethylphenol	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2600	UJ	2600	ug/kg
R1AD1S		11/15/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	78-93-3	2-Butanone (MEK)	3.4	J	8.8	ug/kg
R1AD1S		11/15/2002	Field Sample	91-58-7	2-Chloronaphthalene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	95-57-8	2-Chlorophenol	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	91-57-6	2-Methylnaphthalene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	88-74-4	2-Nitroaniline	2600	UJ	2600	ug/kg
R1AD1S		11/15/2002	Field Sample	88-75-5	2-Nitrophenol	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	1000	U	1000	ug/kg
R1AD1S		11/15/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	99-09-2	3-Nitroaniline	2600	UJ	2600	ug/kg
R1AD1S		11/15/2002	Field Sample	72-54-8	4,4'-DDD	5	UJ	5	ug/kg
R1AD1S		11/15/2002	Field Sample	72-55-9	4,4'-DDE	1.1	R	1.1	ug/kg
R1AD1S		11/15/2002	Field Sample	50-29-3	4,4'-DDT	5	R	5	ug/kg
R1AD1S		11/15/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2600	U	2600	ug/kg
R1AD1S		11/15/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	14	U	14	ug/kg
R1AD1S		11/15/2002	Field Sample	100-02-7	4-Nitrophenol	2600	U	2600	ug/kg
R1AD1S		11/15/2002	Field Sample	83-32-9	Acenaphthene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	208-96-8	Acenaphthylene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	67-64-1	Acetone	26	J	18	ug/kg
R1AD1S		11/15/2002	Field Sample	309-00-2	Aldrin	2.6	U	2.6	ug/kg
R1AD1S		11/15/2002	Field Sample	319-84-6	alpha-BHC	2.6	U	2.6	ug/kg
R1AD1S		11/15/2002	Field Sample	5103-71-9	alpha-Chlordane	2.6	U	2.6	ug/kg
R1AD1S		11/15/2002	Field Sample	7429-90-5	Aluminum	5900		0.02	mg/kg
R1AD1S		11/15/2002	Field Sample	120-12-7	Anthracene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	7440-36-0	Antimony	3	U	3	mg/kg
R1AD1S		11/15/2002	Field Sample	7440-38-2	Arsenic	5.6		0.01	mg/kg
R1AD1S		11/15/2002	Field Sample	7440-39-3	Barium	140		0.94	mg/kg
R1AD1S		11/15/2002	Field Sample	71-43-2	Benzene	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	56-55-3	Benzo(a)anthracene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	50-32-8	Benzo(a)pyrene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	7440-41-7	Beryllium	0.48	J	0.004	mg/kg
R1AD1S		11/15/2002	Field Sample	319-85-7	beta-BHC	2.6	U	2.6	ug/kg
R1AD1S		11/15/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	75-27-4	Bromodichloromethane	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	75-25-2	Bromoform	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	74-83-9	Bromomethane	5.8	UJ	5.8	ug/kg
R1AD1S		11/15/2002	Field Sample	7440-43-9	Cadmium	1.2		0.005	mg/kg
R1AD1S		11/15/2002	Field Sample	7440-70-2	Calcium	8200		1.1	mg/kg
R1AD1S		11/15/2002	Field Sample	86-74-8	Carbazole	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	75-15-0	Carbon Disulfide	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	108-90-7	Chlorobenzene	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	124-48-1	Chlorodibromomethane	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	75-00-3	Chloroethane	5.8	U	5.8	ug/kg
R1AD1S		11/15/2002	Field Sample	67-66-3	Chloroform	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	74-87-3	Chloromethane	5.8	UJ	5.8	ug/kg
R1AD1S		11/15/2002	Field Sample	7440-47-3	Chromium	11		0.01	mg/kg
R1AD1S		11/15/2002	Field Sample	218-01-9	Chrysene	31	J	10	ug/kg
R1AD1S		11/15/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	7440-48-4	Cobalt	6		0.01	mg/kg

Appendix II-B1
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1AD1S		11/15/2002	Field Sample	7440-50-8	Copper	12		0.01	mg/kg
R1AD1S		11/15/2002	Field Sample	75-99-0	Dalapon	3000	R	3000	ug/kg
R1AD1S		11/15/2002	Field Sample	2051-24-3	Decachlorobiphenyl	26	U	26	ug/kg
R1AD1S		11/15/2002	Field Sample	319-86-8	delta-BHC	2.6	U	2.6	ug/kg
R1AD1S		11/15/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	132-64-9	Dibenzofuran	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	1918-00-9	Dicamba	30	R	30	ug/kg
R1AD1S		11/15/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	5	U	5	ug/kg
R1AD1S		11/15/2002	Field Sample	75-09-2	Dichloromethane	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	120-36-5	Dichlorprop	150	R	150	ug/kg
R1AD1S		11/15/2002	Field Sample	60-57-1	Dieldrin	5	U	5	ug/kg
R1AD1S		11/15/2002	Field Sample	84-66-2	Diethyl Phthalate	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	131-11-3	Dimethyl Phthalate	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	84-74-2	Di-n-butylphthalate	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	117-84-0	Di-n-octylphthalate	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	88-85-7	Dinoseb	500	UJ	500	ug/kg
R1AD1S		11/15/2002	Field Sample	959-98-8	Endosulfan I	2.6	U	2.6	ug/kg
R1AD1S		11/15/2002	Field Sample	33213-65-9	Endosulfan II	5	U	5	ug/kg
R1AD1S		11/15/2002	Field Sample	1031-07-8	Endosulfan Sulfate	5	U	5	ug/kg
R1AD1S		11/15/2002	Field Sample	72-20-8	Endrin	5	U	5	ug/kg
R1AD1S		11/15/2002	Field Sample	7421-93-4	Endrin Aldehyde	5	U	5	ug/kg
R1AD1S		11/15/2002	Field Sample	53494-70-5	Endrin Ketone	5	UJ	5	ug/kg
R1AD1S		11/15/2002	Field Sample	100-41-4	Ethylbenzene	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	206-44-0	Fluoranthene	41	J	10	ug/kg
R1AD1S		11/15/2002	Field Sample	86-73-7	Fluorene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.6	U	2.6	ug/kg
R1AD1S		11/15/2002	Field Sample	5103-74-2	gamma-Chlordane	2.6	U	2.6	ug/kg
R1AD1S		11/15/2002	Field Sample	76-44-8	Heptachlor	2.6	UJ	2.6	ug/kg
R1AD1S		11/15/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.6	U	2.6	ug/kg
R1AD1S		11/15/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	15	U	15	ug/kg
R1AD1S		11/15/2002	Field Sample	118-74-1	Hexachlorobenzene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	10	U	10	ug/kg
R1AD1S		11/15/2002	Field Sample	87-68-3	Hexachlorobutadiene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	500	UJ	500	ug/kg
R1AD1S		11/15/2002	Field Sample	67-72-1	Hexachloroethane	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	7439-89-6	Iron	12000		0.05	mg/kg
R1AD1S		11/15/2002	Field Sample	78-59-1	Isophorone	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	7439-92-1	Lead	12		0.005	mg/kg
R1AD1S		11/15/2002	Field Sample	7439-95-4	Magnesium	3400		47	mg/kg
R1AD1S		11/15/2002	Field Sample	7439-96-5	Manganese	500		0.01	mg/kg
R1AD1S		11/15/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	3000	R	3000	ug/kg
R1AD1S		11/15/2002	Field Sample	93-65-2	MCPP	370	J	120	ug/kg
R1AD1S		11/15/2002	Field Sample	7439-97-6	Mercury	0.065		0.017	mg/kg
R1AD1S		11/15/2002	Field Sample	72-43-5	Methoxychlor	26	UJ	26	ug/kg
R1AD1S		11/15/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	14	U	14	ug/kg
R1AD1S		11/15/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	5	U	5	ug/kg
R1AD1S		11/15/2002	Field Sample	91-20-3	Naphthalene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	7440-02-0	Nickel	15		0.04	mg/kg
R1AD1S		11/15/2002	Field Sample	98-95-3	Nitrobenzene	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	26	U	26	ug/kg
R1AD1S		11/15/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	15	U	15	ug/kg
R1AD1S		11/15/2002	Field Sample	106-47-8	P-Chloroaniline	1000	U	1000	ug/kg
R1AD1S		11/15/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	10	U	10	ug/kg
R1AD1S		11/15/2002	Field Sample	87-86-5	Pentachlorophenol	26	R	26	ug/kg
R1AD1S		11/15/2002	Field Sample	PH	pH	7		1	units
R1AD1S		11/15/2002	Field Sample	85-01-8	Phenanthrene	36	J	10	ug/kg
R1AD1S		11/15/2002	Field Sample	108-95-2	Phenol	500	U	500	ug/kg
R1AD1S		11/15/2002	Field Sample	100-01-6	P-Nitroaniline	2600	U	2600	ug/kg
R1AD1S		11/15/2002	Field Sample	7440-09-7	Potassium	820		94	mg/kg
R1AD1S		11/15/2002	Field Sample	129-00-0	Pyrene	67	J	10	ug/kg
R1AD1S		11/15/2002	Field Sample	7782-49-2	Selenium	1.3	U	1.3	mg/kg
R1AD1S		11/15/2002	Field Sample	7440-22-4	Silver	1.3	UJ	1.3	mg/kg
R1AD1S		11/15/2002	Field Sample	7440-23-5	Sodium	78		100	mg/kg
R1AD1S		11/15/2002	Field Sample	100-42-5	Styrene (Monomer)	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	10	U	10	ug/kg
R1AD1S		11/15/2002	Field Sample	127-18-4	Tetrachloroethene	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	7440-28-0	Thallium	1.3	U	1.3	mg/kg
R1AD1S		11/15/2002	Field Sample	108-88-3	Toluene	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	E-10195	Total Organic Carbon	13000		500	mg/kg
R1AD1S		11/15/2002	Field Sample	8001-35-2	Toxaphene	260	U	260	ug/kg
R1AD1S		11/15/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	5	U	5	ug/kg
R1AD1S		11/15/2002	Field Sample	79-01-6	Trichloroethylene	2.9	U	2.9	ug/kg
R1AD1S		11/15/2002	Field Sample	7440-62-2	Vanadium	19		0.01	mg/kg
R1AD1S		11/15/2002	Field Sample	75-01-4	Vinyl chloride	5.8	U	5.8	ug/kg
R1AD1S		11/15/2002	Field Sample	1330-20-7	Xylenes, Total	9.3	U	9.3	ug/kg
R1AD1S		11/15/2002	Field Sample	7440-66-6	Zinc	89	J	0.02	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1BD1S		11/15/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	93-76-5	2,4,5-T	11	R	11	ug/kg
R1BD1S		11/15/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	11	R	11	ug/kg
R1BD1S		11/15/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	94-75-7	2,4-D	11	R	11	ug/kg
R1BD1S		11/15/2002	Field Sample	94-82-6	2,4-DB	11	R	11	ug/kg
R1BD1S		11/15/2002	Field Sample	120-83-2	2,4-Dichlorophenol	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	105-67-9	2,4-Dimethylphenol	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2300	UJ	2300	ug/kg
R1BD1S		11/15/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	78-93-3	2-Butanone (MEK)	14	U	14	ug/kg
R1BD1S		11/15/2002	Field Sample	91-58-7	2-Chloronaphthalene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	95-57-8	2-Chlorophenol	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	91-57-6	2-Methylnaphthalene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	88-74-4	2-Nitroaniline	2300	UJ	2300	ug/kg
R1BD1S		11/15/2002	Field Sample	88-75-5	2-Nitrophenol	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	880	U	880	ug/kg
R1BD1S		11/15/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	99-09-2	3-Nitroaniline	2300	UJ	2300	ug/kg
R1BD1S		11/15/2002	Field Sample	72-54-8	4,4'-DDD	4.4	U	4.4	ug/kg
R1BD1S		11/15/2002	Field Sample	72-55-9	4,4'-DDE	4.4	U	4.4	ug/kg
R1BD1S		11/15/2002	Field Sample	50-29-3	4,4'-DDT	4.4	U	4.4	ug/kg
R1BD1S		11/15/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2300	U	2300	ug/kg
R1BD1S		11/15/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	14	U	14	ug/kg
R1BD1S		11/15/2002	Field Sample	100-02-7	4-Nitrophenol	2300	U	2300	ug/kg
R1BD1S		11/15/2002	Field Sample	83-32-9	Acenaphthene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	208-96-8	Acenaphthylene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	67-64-1	Acetone	28	UJ	28	ug/kg
R1BD1S		11/15/2002	Field Sample	309-00-2	Aldrin	2.3	U	2.3	ug/kg
R1BD1S		11/15/2002	Field Sample	319-84-6	alpha-BHC	2.3	U	2.3	ug/kg
R1BD1S		11/15/2002	Field Sample	5103-71-9	alpha-Chlordane	2.3	U	2.3	ug/kg
R1BD1S		11/15/2002	Field Sample	7429-90-5	Aluminum	1300		0.02	mg/kg
R1BD1S		11/15/2002	Field Sample	120-12-7	Anthracene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	7440-36-0	Antimony	2.7	U	2.7	mg/kg
R1BD1S		11/15/2002	Field Sample	7440-38-2	Arsenic	2.3		0.01	mg/kg
R1BD1S		11/15/2002	Field Sample	7440-39-3	Barium	44		0.94	mg/kg
R1BD1S		11/15/2002	Field Sample	71-43-2	Benzene	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	56-55-3	Benzo(a)anthracene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	50-32-8	Benzo(a)pyrene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	7440-41-7	Beryllium	0.53	U	0.53	mg/kg
R1BD1S		11/15/2002	Field Sample	319-85-7	beta-BHC	2.3	U	2.3	ug/kg
R1BD1S		11/15/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	75-27-4	Bromodichloromethane	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	75-25-2	Bromoform	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	74-83-9	Bromomethane	5.6	UJ	5.6	ug/kg
R1BD1S		11/15/2002	Field Sample	7440-43-9	Cadmium	0.61	UJ	0.61	mg/kg
R1BD1S		11/15/2002	Field Sample	7440-70-2	Calcium	2400		1.1	mg/kg
R1BD1S		11/15/2002	Field Sample	86-74-8	Carbazole	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	75-15-0	Carbon Disulfide	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	108-90-7	Chlorobenzene	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	124-48-1	Chlorodibromomethane	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	75-00-3	Chloroethane	5.6	U	5.6	ug/kg
R1BD1S		11/15/2002	Field Sample	67-66-3	Chloroform	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	74-87-3	Chloromethane	5.6	UJ	5.6	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1BD1S		11/15/2002	Field Sample	7440-47-3	Chromium	6		0.01	mg/kg
R1BD1S		11/15/2002	Field Sample	218-01-9	Chrysene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	7440-48-4	Cobalt	2.8		0.01	mg/kg
R1BD1S		11/15/2002	Field Sample	7440-50-8	Copper	1.4	J	0.01	mg/kg
R1BD1S		11/15/2002	Field Sample	75-99-0	Dalapon	2700	R	2700	ug/kg
R1BD1S		11/15/2002	Field Sample	2051-24-3	Decachlorobiphenyl	23	U	23	ug/kg
R1BD1S		11/15/2002	Field Sample	319-86-8	delta-BHC	2.3	U	2.3	ug/kg
R1BD1S		11/15/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	132-64-9	Dibenzofuran	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	1918-00-9	Dicamba	27	R	27	ug/kg
R1BD1S		11/15/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.4	U	4.4	ug/kg
R1BD1S		11/15/2002	Field Sample	75-09-2	Dichloromethane	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	120-36-5	Dichlorprop	130	R	130	ug/kg
R1BD1S		11/15/2002	Field Sample	60-57-1	Dieldrin	4.4	U	4.4	ug/kg
R1BD1S		11/15/2002	Field Sample	84-66-2	Diethyl Phthalate	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	131-11-3	Dimethyl Phthalate	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	84-74-2	Di-n-butylphthalate	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	117-84-0	Di-n-octylphthalate	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	88-85-7	Dinoseb	440	UJ	440	ug/kg
R1BD1S		11/15/2002	Field Sample	959-98-8	Endosulfan I	2.3	U	2.3	ug/kg
R1BD1S		11/15/2002	Field Sample	33213-65-9	Endosulfan II	4.4	U	4.4	ug/kg
R1BD1S		11/15/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.4	U	4.4	ug/kg
R1BD1S		11/15/2002	Field Sample	72-20-8	Endrin	4.4	U	4.4	ug/kg
R1BD1S		11/15/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.4	U	4.4	ug/kg
R1BD1S		11/15/2002	Field Sample	53494-70-5	Endrin Ketone	4.4	U	4.4	ug/kg
R1BD1S		11/15/2002	Field Sample	100-41-4	Ethylbenzene	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	206-44-0	Fluoranthene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	86-73-7	Fluorene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.3	U	2.3	ug/kg
R1BD1S		11/15/2002	Field Sample	5103-74-2	gamma-Chlordane	2.3	U	2.3	ug/kg
R1BD1S		11/15/2002	Field Sample	76-44-8	Heptachlor	2.3	U	2.3	ug/kg
R1BD1S		11/15/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.3	U	2.3	ug/kg
R1BD1S		11/15/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	13	U	13	ug/kg
R1BD1S		11/15/2002	Field Sample	118-74-1	Hexachlorobenzene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.9	U	8.9	ug/kg
R1BD1S		11/15/2002	Field Sample	87-68-3	Hexachlorobutadiene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	440	UJ	440	ug/kg
R1BD1S		11/15/2002	Field Sample	67-72-1	Hexachloroethane	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	7439-89-6	Iron	5000		0.05	mg/kg
R1BD1S		11/15/2002	Field Sample	78-59-1	Isophorone	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	7439-92-1	Lead	4.9		0.005	mg/kg
R1BD1S		11/15/2002	Field Sample	7439-95-4	Magnesium	1100		47	mg/kg
R1BD1S		11/15/2002	Field Sample	7439-96-5	Manganese	83		0.01	mg/kg
R1BD1S		11/15/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2700	R	2700	ug/kg
R1BD1S		11/15/2002	Field Sample	93-65-2	MCPP	2700	R	2700	ug/kg
R1BD1S		11/15/2002	Field Sample	7439-97-6	Mercury	0.024	U	0.024	mg/kg
R1BD1S		11/15/2002	Field Sample	72-43-5	Methoxychlor	23	U	23	ug/kg
R1BD1S		11/15/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	14	U	14	ug/kg
R1BD1S		11/15/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	4.4	U	4.4	ug/kg
R1BD1S		11/15/2002	Field Sample	91-20-3	Naphthalene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	7440-02-0	Nickel	8.2		0.04	mg/kg
R1BD1S		11/15/2002	Field Sample	98-95-3	Nitrobenzene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	23	U	23	ug/kg
R1BD1S		11/15/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	13	U	13	ug/kg
R1BD1S		11/15/2002	Field Sample	106-47-8	P-Chloroaniline	880	U	880	ug/kg
R1BD1S		11/15/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.9	U	8.9	ug/kg
R1BD1S		11/15/2002	Field Sample	87-86-5	Pentachlorophenol	23	R	23	ug/kg
R1BD1S		11/15/2002	Field Sample	PH	pH	7		1	units
R1BD1S		11/15/2002	Field Sample	85-01-8	Phenanthrene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	108-95-2	Phenol	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	100-01-6	P-Nitroaniline	2300	U	2300	ug/kg
R1BD1S		11/15/2002	Field Sample	7440-09-7	Potassium	260		94	mg/kg
R1BD1S		11/15/2002	Field Sample	129-00-0	Pyrene	440	U	440	ug/kg
R1BD1S		11/15/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R1BD1S		11/15/2002	Field Sample	7440-22-4	Silver	1.2	UJ	1.2	mg/kg
R1BD1S		11/15/2002	Field Sample	7440-23-5	Sodium	49	J	100	mg/kg
R1BD1S		11/15/2002	Field Sample	100-42-5	Styrene (Monomer)	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.9	U	8.9	ug/kg
R1BD1S		11/15/2002	Field Sample	127-18-4	Tetrachloroethene	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	7440-28-0	Thallium	1.2	U	1.2	mg/kg
R1BD1S		11/15/2002	Field Sample	108-88-3	Toluene	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R1BD1S		11/15/2002	Field Sample	8001-35-2	Toxaphene	230	U	230	ug/kg
R1BD1S		11/15/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.8	U	2.8	ug/kg
R1BD1S		11/15/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.4	U	4.4	ug/kg
R1BD1S		11/15/2002	Field Sample	79-01-6	Trichloroethylene	2.8	U	2.8	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R1BD1S		11/15/2002	Field Sample	7440-62-2	Vanadium	6.2		0.01	mg/kg
R1BD1S		11/15/2002	Field Sample	75-01-4	Vinyl chloride	5.6	U	5.6	ug/kg
R1BD1S		11/15/2002	Field Sample	1330-20-7	Xylenes, Total	5.7	U	5.7	ug/kg
R1BD1S		11/15/2002	Field Sample	7440-66-6	Zinc	15	U	15	mg/kg
R2AU1S		11/14/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	5.1	U	5.1	ug/kg
R2AU1S		11/14/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	93-76-5	2,4,5-T	11	U	11	ug/kg
R2AU1S		11/14/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	11	U	11	ug/kg
R2AU1S		11/14/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	94-75-7	2,4-D	11	UJ	11	ug/kg
R2AU1S		11/14/2002	Field Sample	94-82-6	2,4-DB	11	U	11	ug/kg
R2AU1S		11/14/2002	Field Sample	120-83-2	2,4-Dichlorophenol	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	105-67-9	2,4-Dimethylphenol	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2200	U	2200	ug/kg
R2AU1S		11/14/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	78-93-3	2-Butanone (MEK)	13	U	13	ug/kg
R2AU1S		11/14/2002	Field Sample	91-58-7	2-Chloronaphthalene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	95-57-8	2-Chlorophenol	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	91-57-6	2-Methylnaphthalene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	88-74-4	2-Nitroaniline	2200	U	2200	ug/kg
R2AU1S		11/14/2002	Field Sample	88-75-5	2-Nitrophenol	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	850	U	850	ug/kg
R2AU1S		11/14/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	99-09-2	3-Nitroaniline	2200	U	2200	ug/kg
R2AU1S		11/14/2002	Field Sample	72-54-8	4,4'-DDD	4.2	UJ	4.2	ug/kg
R2AU1S		11/14/2002	Field Sample	72-55-9	4,4'-DDE	4.2	UJ	4.2	ug/kg
R2AU1S		11/14/2002	Field Sample	50-29-3	4,4'-DDT	4.2	UJ	4.2	ug/kg
R2AU1S		11/14/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2200	U	2200	ug/kg
R2AU1S		11/14/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	13	ug/kg
R2AU1S		11/14/2002	Field Sample	100-02-7	4-Nitrophenol	2200	U	2200	ug/kg
R2AU1S		11/14/2002	Field Sample	83-32-9	Acenaphthene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	208-96-8	Acenaphthylene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	67-64-1	Acetone	4.4	J	18	ug/kg
R2AU1S		11/14/2002	Field Sample	309-00-2	Aldrin	2.2	UJ	2.2	ug/kg
R2AU1S		11/14/2002	Field Sample	319-84-6	alpha-BHC	2.2	UJ	2.2	ug/kg
R2AU1S		11/14/2002	Field Sample	5103-71-9	alpha-Chlordane	2.2	UJ	2.2	ug/kg
R2AU1S		11/14/2002	Field Sample	7429-90-5	Aluminum	1200	J	0.02	mg/kg
R2AU1S		11/14/2002	Field Sample	120-12-7	Anthracene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	7440-36-0	Antimony	2.6	U	2.6	mg/kg
R2AU1S		11/14/2002	Field Sample	7440-38-2	Arsenic	2.1		0.01	mg/kg
R2AU1S		11/14/2002	Field Sample	7440-39-3	Barium	35		0.94	mg/kg
R2AU1S		11/14/2002	Field Sample	71-43-2	Benzene	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	56-55-3	Benzo(a)anthracene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	50-32-8	Benzo(a)pyrene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	7440-41-7	Beryllium	0.51	U	0.51	mg/kg
R2AU1S		11/14/2002	Field Sample	319-85-7	beta-BHC	2.2	UJ	2.2	ug/kg
R2AU1S		11/14/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	75-27-4	Bromodichloromethane	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	75-25-2	Bromoform	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	74-83-9	Bromomethane	5.1	U	5.1	ug/kg
R2AU1S		11/14/2002	Field Sample	7440-43-9	Cadmium	0.58	UJ	0.58	mg/kg
R2AU1S		11/14/2002	Field Sample	7440-70-2	Calcium	2400	J	1.1	mg/kg
R2AU1S		11/14/2002	Field Sample	86-74-8	Carbazole	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	75-15-0	Carbon Disulfide	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	108-90-7	Chlorobenzene	2.5	U	2.5	ug/kg

Appendix II-B1
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2AU1S		11/14/2002	Field Sample	124-48-1	Chlorodibromomethane	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	75-00-3	Chloroethane	5.1	U	5.1	ug/kg
R2AU1S		11/14/2002	Field Sample	67-66-3	Chloroform	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	74-87-3	Chloromethane	5.1	UJ	5.1	ug/kg
R2AU1S		11/14/2002	Field Sample	7440-47-3	Chromium	2.8		0.01	mg/kg
R2AU1S		11/14/2002	Field Sample	218-01-9	Chrysene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	7440-48-4	Cobalt	2.4		0.01	mg/kg
R2AU1S		11/14/2002	Field Sample	7440-50-8	Copper	1.2	J	0.01	mg/kg
R2AU1S		11/14/2002	Field Sample	75-99-0	Dalapon	2600	R	2600	ug/kg
R2AU1S		11/14/2002	Field Sample	2051-24-3	Decachlorobiphenyl	22	U	22	ug/kg
R2AU1S		11/14/2002	Field Sample	319-86-8	delta-BHC	2.2	UJ	2.2	ug/kg
R2AU1S		11/14/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	132-64-9	Dibenzofuran	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	1918-00-9	Dicamba	26	U	26	ug/kg
R2AU1S		11/14/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.2	U	4.2	ug/kg
R2AU1S		11/14/2002	Field Sample	75-09-2	Dichloromethane	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	120-36-5	Dichlorprop	130	U	130	ug/kg
R2AU1S		11/14/2002	Field Sample	60-57-1	Dieldrin	4.2	UJ	4.2	ug/kg
R2AU1S		11/14/2002	Field Sample	84-66-2	Diethyl Phthalate	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	131-11-3	Dimethyl Phthalate	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	84-74-2	Di-n-butylphthalate	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	117-84-0	Di-n-octylphthalate	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	88-85-7	Dinoseb	420	UJ	420	ug/kg
R2AU1S		11/14/2002	Field Sample	959-98-8	Endosulfan I	2.2	UJ	2.2	ug/kg
R2AU1S		11/14/2002	Field Sample	33213-65-9	Endosulfan II	4.2	UJ	4.2	ug/kg
R2AU1S		11/14/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.2	UJ	4.2	ug/kg
R2AU1S		11/14/2002	Field Sample	72-20-8	Endrin	4.2	UJ	4.2	ug/kg
R2AU1S		11/14/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.2	UJ	4.2	ug/kg
R2AU1S		11/14/2002	Field Sample	53494-70-5	Endrin Ketone	4.2	UJ	4.2	ug/kg
R2AU1S		11/14/2002	Field Sample	100-41-4	Ethylbenzene	1.2	J	0.83	ug/kg
R2AU1S		11/14/2002	Field Sample	206-44-0	Fluoranthene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	86-73-7	Fluorene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.2	UJ	2.2	ug/kg
R2AU1S		11/14/2002	Field Sample	5103-74-2	gamma-Chlordane	2.2	UJ	2.2	ug/kg
R2AU1S		11/14/2002	Field Sample	76-44-8	Heptachlor	2.2	UJ	2.2	ug/kg
R2AU1S		11/14/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.2	UJ	2.2	ug/kg
R2AU1S		11/14/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	13	U	13	ug/kg
R2AU1S		11/14/2002	Field Sample	118-74-1	Hexachlorobenzene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.6	U	8.6	ug/kg
R2AU1S		11/14/2002	Field Sample	87-68-3	Hexachlorobutadiene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	67-72-1	Hexachloroethane	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	7439-89-6	Iron	4400		0.05	mg/kg
R2AU1S		11/14/2002	Field Sample	78-59-1	Isophorone	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	7439-92-1	Lead	4	J	0.005	mg/kg
R2AU1S		11/14/2002	Field Sample	7439-95-4	Magnesium	1000		47	mg/kg
R2AU1S		11/14/2002	Field Sample	7439-96-5	Manganese	90		0.01	mg/kg
R2AU1S		11/14/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2600	U	2600	ug/kg
R2AU1S		11/14/2002	Field Sample	93-65-2	MCPP	2600	U	2600	ug/kg
R2AU1S		11/14/2002	Field Sample	7439-97-6	Mercury	0.0033	J	0.017	mg/kg
R2AU1S		11/14/2002	Field Sample	72-43-5	Methoxychlor	22	UJ	22	ug/kg
R2AU1S		11/14/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	13	U	13	ug/kg
R2AU1S		11/14/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	4.2	U	4.2	ug/kg
R2AU1S		11/14/2002	Field Sample	91-20-3	Naphthalene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	7440-02-0	Nickel	5.8		0.04	mg/kg
R2AU1S		11/14/2002	Field Sample	98-95-3	Nitrobenzene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	22	U	22	ug/kg
R2AU1S		11/14/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	13	U	13	ug/kg
R2AU1S		11/14/2002	Field Sample	106-47-8	P-Chloroaniline	850	U	850	ug/kg
R2AU1S		11/14/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.6	U	8.6	ug/kg
R2AU1S		11/14/2002	Field Sample	87-86-5	Pentachlorophenol	22	U	22	ug/kg
R2AU1S		11/14/2002	Field Sample	PH	pH	7.4		1	units
R2AU1S		11/14/2002	Field Sample	85-01-8	Phenanthrene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	108-95-2	Phenol	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	100-01-6	P-Nitroaniline	2200	U	2200	ug/kg
R2AU1S		11/14/2002	Field Sample	7440-09-7	Potassium	270		94	mg/kg
R2AU1S		11/14/2002	Field Sample	129-00-0	Pyrene	420	U	420	ug/kg
R2AU1S		11/14/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R2AU1S		11/14/2002	Field Sample	7440-22-4	Silver	1.2	UJ	1.2	mg/kg
R2AU1S		11/14/2002	Field Sample	7440-23-5	Sodium	47	J	100	mg/kg
R2AU1S		11/14/2002	Field Sample	100-42-5	Styrene (Monomer)	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.6	U	8.6	ug/kg
R2AU1S		11/14/2002	Field Sample	127-18-4	Tetrachloroethene	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	7440-28-0	Thallium	1.2	U	1.2	mg/kg
R2AU1S		11/14/2002	Field Sample	108-88-3	Toluene	1.2	J	1	ug/kg
R2AU1S		11/14/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2AU1S		11/14/2002	Field Sample	8001-35-2	Toxaphene	220	UJ	220	ug/kg
R2AU1S		11/14/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.2	U	4.2	ug/kg
R2AU1S		11/14/2002	Field Sample	79-01-6	Trichloroethylene	2.5	U	2.5	ug/kg
R2AU1S		11/14/2002	Field Sample	7440-62-2	Vanadium	5		0.01	mg/kg
R2AU1S		11/14/2002	Field Sample	75-01-4	Vinyl chloride	5.1	U	5.1	ug/kg
R2AU1S		11/14/2002	Field Sample	1330-20-7	Xylenes, Total	6.8		11	ug/kg
R2AU1S		11/14/2002	Field Sample	7440-66-6	Zinc	13		0.02	mg/kg
R2BU1S		11/15/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	93-76-5	2,4,5-T	10	R	10	ug/kg
R2BU1S		11/15/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	10	R	10	ug/kg
R2BU1S		11/15/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	94-75-7	2,4-D	10	R	10	ug/kg
R2BU1S		11/15/2002	Field Sample	94-82-6	2,4-DB	10	R	10	ug/kg
R2BU1S		11/15/2002	Field Sample	120-83-2	2,4-Dichlorophenol	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	105-67-9	2,4-Dimethylphenol	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2100	UJ	2100	ug/kg
R2BU1S		11/15/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	78-93-3	2-Butanone (MEK)	11	U	11	ug/kg
R2BU1S		11/15/2002	Field Sample	91-58-7	2-Chloronaphthalene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	95-57-8	2-Chlorophenol	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	91-57-6	2-Methylnaphthalene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	88-74-4	2-Nitroaniline	2100	UJ	2100	ug/kg
R2BU1S		11/15/2002	Field Sample	88-75-5	2-Nitrophenol	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	820	U	820	ug/kg
R2BU1S		11/15/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	99-09-2	3-Nitroaniline	2100	UJ	2100	ug/kg
R2BU1S		11/15/2002	Field Sample	72-54-8	4,4'-DDD	4.1	U	4.1	ug/kg
R2BU1S		11/15/2002	Field Sample	72-55-9	4,4'-DDE	4.1	U	4.1	ug/kg
R2BU1S		11/15/2002	Field Sample	50-29-3	4,4'-DDT	4.1	U	4.1	ug/kg
R2BU1S		11/15/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2100	U	2100	ug/kg
R2BU1S		11/15/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	11	U	11	ug/kg
R2BU1S		11/15/2002	Field Sample	100-02-7	4-Nitrophenol	2100	U	2100	ug/kg
R2BU1S		11/15/2002	Field Sample	83-32-9	Acenaphthene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	208-96-8	Acenaphthylene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	67-64-1	Acetone	6.3	J	18	ug/kg
R2BU1S		11/15/2002	Field Sample	309-00-2	Aldrin	2.1	U	2.1	ug/kg
R2BU1S		11/15/2002	Field Sample	319-84-6	alpha-BHC	2.1	U	2.1	ug/kg
R2BU1S		11/15/2002	Field Sample	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/kg
R2BU1S		11/15/2002	Field Sample	7429-90-5	Aluminum	1400		0.02	mg/kg
R2BU1S		11/15/2002	Field Sample	120-12-7	Anthracene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	7440-36-0	Antimony	2.5	U	2.5	mg/kg
R2BU1S		11/15/2002	Field Sample	7440-38-2	Arsenic	2.1		0.01	mg/kg
R2BU1S		11/15/2002	Field Sample	7440-39-3	Barium	53		0.94	mg/kg
R2BU1S		11/15/2002	Field Sample	71-43-2	Benzene	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	56-55-3	Benzo(a)anthracene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	50-32-8	Benzo(a)pyrene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	7440-41-7	Beryllium	0.5	U	0.5	mg/kg
R2BU1S		11/15/2002	Field Sample	319-85-7	beta-BHC	2.1	U	2.1	ug/kg
R2BU1S		11/15/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	75-27-4	Bromodichloromethane	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	75-25-2	Bromoform	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	74-83-9	Bromomethane	4.6	UJ	4.6	ug/kg
R2BU1S		11/15/2002	Field Sample	7440-43-9	Cadmium	0.57	UJ	0.57	mg/kg
R2BU1S		11/15/2002	Field Sample	7440-70-2	Calcium	2500		1.1	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2BU1S		11/15/2002	Field Sample	86-74-8	Carbazole	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	75-15-0	Carbon Disulfide	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	108-90-7	Chlorobenzene	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	124-48-1	Chlorodibromomethane	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	75-00-3	Chloroethane	4.6	U	4.6	ug/kg
R2BU1S		11/15/2002	Field Sample	67-66-3	Chloroform	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	74-87-3	Chloromethane	4.6	UJ	4.6	ug/kg
R2BU1S		11/15/2002	Field Sample	7440-47-3	Chromium	3.7		0.01	mg/kg
R2BU1S		11/15/2002	Field Sample	218-01-9	Chrysene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	7440-48-4	Cobalt	2.7		0.01	mg/kg
R2BU1S		11/15/2002	Field Sample	7440-50-8	Copper	1.6	J	0.01	mg/kg
R2BU1S		11/15/2002	Field Sample	75-99-0	Dalapon	2500	R	2500	ug/kg
R2BU1S		11/15/2002	Field Sample	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg
R2BU1S		11/15/2002	Field Sample	319-86-8	delta-BHC	2.1	U	2.1	ug/kg
R2BU1S		11/15/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	132-64-9	Dibenzofuran	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	1918-00-9	Dicamba	25	R	25	ug/kg
R2BU1S		11/15/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.1	U	4.1	ug/kg
R2BU1S		11/15/2002	Field Sample	75-09-2	Dichloromethane	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	120-36-5	Dichlorprop	120	R	120	ug/kg
R2BU1S		11/15/2002	Field Sample	60-57-1	Dieldrin	4.1	U	4.1	ug/kg
R2BU1S		11/15/2002	Field Sample	84-66-2	Diethyl Phthalate	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	131-11-3	Dimethyl Phthalate	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	84-74-2	Di-n-butylphthalate	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	117-84-0	Di-n-octylphthalate	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	88-85-7	Dinoseb	410	UJ	410	ug/kg
R2BU1S		11/15/2002	Field Sample	959-98-8	Endosulfan I	2.1	U	2.1	ug/kg
R2BU1S		11/15/2002	Field Sample	33213-65-9	Endosulfan II	4.1	U	4.1	ug/kg
R2BU1S		11/15/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.1	U	4.1	ug/kg
R2BU1S		11/15/2002	Field Sample	72-20-8	Endrin	4.1	U	4.1	ug/kg
R2BU1S		11/15/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.1	U	4.1	ug/kg
R2BU1S		11/15/2002	Field Sample	53494-70-5	Endrin Ketone	4.1	U	4.1	ug/kg
R2BU1S		11/15/2002	Field Sample	100-41-4	Ethylbenzene	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	206-44-0	Fluoranthene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	86-73-7	Fluorene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.1	U	2.1	ug/kg
R2BU1S		11/15/2002	Field Sample	5103-74-2	gamma-Chlordane	2.1	U	2.1	ug/kg
R2BU1S		11/15/2002	Field Sample	76-44-8	Heptachlor	2.1	U	2.1	ug/kg
R2BU1S		11/15/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.1	U	2.1	ug/kg
R2BU1S		11/15/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg
R2BU1S		11/15/2002	Field Sample	118-74-1	Hexachlorobenzene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.4	U	8.4	ug/kg
R2BU1S		11/15/2002	Field Sample	87-68-3	Hexachlorobutadiene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	410	UJ	410	ug/kg
R2BU1S		11/15/2002	Field Sample	67-72-1	Hexachloroethane	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	7439-89-6	Iron	5500		0.05	mg/kg
R2BU1S		11/15/2002	Field Sample	78-59-1	Isophorone	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	7439-92-1	Lead	4.4		0.005	mg/kg
R2BU1S		11/15/2002	Field Sample	7439-95-4	Magnesium	1100		47	mg/kg
R2BU1S		11/15/2002	Field Sample	7439-96-5	Manganese	86		0.01	mg/kg
R2BU1S		11/15/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2500	R	2500	ug/kg
R2BU1S		11/15/2002	Field Sample	93-65-2	MCPP	2500	R	2500	ug/kg
R2BU1S		11/15/2002	Field Sample	7439-97-6	Mercury	0.0043	J	0.017	mg/kg
R2BU1S		11/15/2002	Field Sample	72-43-5	Methoxychlor	21	U	21	ug/kg
R2BU1S		11/15/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	11	U	11	ug/kg
R2BU1S		11/15/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	4.1	U	4.1	ug/kg
R2BU1S		11/15/2002	Field Sample	91-20-3	Naphthalene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	7440-02-0	Nickel	6.5		0.04	mg/kg
R2BU1S		11/15/2002	Field Sample	98-95-3	Nitrobenzene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	21	U	21	ug/kg
R2BU1S		11/15/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg
R2BU1S		11/15/2002	Field Sample	106-47-8	P-Chloroaniline	820	U	820	ug/kg
R2BU1S		11/15/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.4	U	8.4	ug/kg
R2BU1S		11/15/2002	Field Sample	87-86-5	Pentachlorophenol	21	R	21	ug/kg
R2BU1S		11/15/2002	Field Sample	PH	pH	6.9		1	units
R2BU1S		11/15/2002	Field Sample	85-01-8	Phenanthrene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	108-95-2	Phenol	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	100-01-6	P-Nitroaniline	2100	U	2100	ug/kg
R2BU1S		11/15/2002	Field Sample	7440-09-7	Potassium	270		94	mg/kg
R2BU1S		11/15/2002	Field Sample	129-00-0	Pyrene	410	U	410	ug/kg
R2BU1S		11/15/2002	Field Sample	7782-49-2	Selenium	1.1	U	1.1	mg/kg
R2BU1S		11/15/2002	Field Sample	7440-22-4	Silver	1.1	UJ	1.1	mg/kg
R2BU1S		11/15/2002	Field Sample	7440-23-5	Sodium	37	J	100	mg/kg
R2BU1S		11/15/2002	Field Sample	100-42-5	Styrene (Monomer)	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.4	U	8.4	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2BU1S		11/15/2002	Field Sample	127-18-4	Tetrachloroethene	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	7440-28-0	Thallium	1.1	U	1.1	mg/kg
R2BU1S		11/15/2002	Field Sample	108-88-3	Toluene	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R2BU1S		11/15/2002	Field Sample	8001-35-2	Toxaphene	210	U	210	ug/kg
R2BU1S		11/15/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.1	U	4.1	ug/kg
R2BU1S		11/15/2002	Field Sample	79-01-6	Trichloroethylene	2.3	U	2.3	ug/kg
R2BU1S		11/15/2002	Field Sample	7440-62-2	Vanadium	7.2		0.01	mg/kg
R2BU1S		11/15/2002	Field Sample	75-01-4	Vinyl chloride	4.6	U	4.6	ug/kg
R2BU1S		11/15/2002	Field Sample	1330-20-7	Xylenes, Total	5.2	U	5.2	ug/kg
R2BU1S		11/15/2002	Field Sample	7440-66-6	Zinc	14	U	14	mg/kg
R2AM1S		11/14/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	5.5	U	5.5	ug/kg
R2AM1S		11/14/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	93-76-5	2,4,5-T	12	U	12	ug/kg
R2AM1S		11/14/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	12	U	12	ug/kg
R2AM1S		11/14/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	94-75-7	2,4-D	12	UJ	12	ug/kg
R2AM1S		11/14/2002	Field Sample	94-82-6	2,4-DB	12	U	12	ug/kg
R2AM1S		11/14/2002	Field Sample	120-83-2	2,4-Dichlorophenol	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	105-67-9	2,4-Dimethylphenol	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2400	U	2400	ug/kg
R2AM1S		11/14/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	78-93-3	2-Butanone (MEK)	14	U	14	ug/kg
R2AM1S		11/14/2002	Field Sample	91-58-7	2-Chloronaphthalene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	95-57-8	2-Chlorophenol	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	91-57-6	2-Methylnaphthalene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	88-74-4	2-Nitroaniline	2400	U	2400	ug/kg
R2AM1S		11/14/2002	Field Sample	88-75-5	2-Nitrophenol	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	930	U	930	ug/kg
R2AM1S		11/14/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	99-09-2	3-Nitroaniline	2400	U	2400	ug/kg
R2AM1S		11/14/2002	Field Sample	72-54-8	4,4'-DDD	4.6	UJ	4.6	ug/kg
R2AM1S		11/14/2002	Field Sample	72-55-9	4,4'-DDE	4.6	UJ	4.6	ug/kg
R2AM1S		11/14/2002	Field Sample	50-29-3	4,4'-DDT	4.6	UJ	4.6	ug/kg
R2AM1S		11/14/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2400	U	2400	ug/kg
R2AM1S		11/14/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	14	U	14	ug/kg
R2AM1S		11/14/2002	Field Sample	100-02-7	4-Nitrophenol	2400	U	2400	ug/kg
R2AM1S		11/14/2002	Field Sample	83-32-9	Acenaphthene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	208-96-8	Acenaphthylene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	67-64-1	Acetone	6.4	J	18	ug/kg
R2AM1S		11/14/2002	Field Sample	309-00-2	Aldrin	2.4	UJ	2.4	ug/kg
R2AM1S		11/14/2002	Field Sample	319-84-6	alpha-BHC	2.4	UJ	2.4	ug/kg
R2AM1S		11/14/2002	Field Sample	5103-71-9	alpha-Chlordane	2.4	UJ	2.4	ug/kg
R2AM1S		11/14/2002	Field Sample	7429-90-5	Aluminum	3800	J	0.02	mg/kg
R2AM1S		11/14/2002	Field Sample	120-12-7	Anthracene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	7440-36-0	Antimony	2.8	U	2.8	mg/kg
R2AM1S		11/14/2002	Field Sample	7440-38-2	Arsenic	4.1		0.01	mg/kg
R2AM1S		11/14/2002	Field Sample	7440-39-3	Barium	130		0.94	mg/kg
R2AM1S		11/14/2002	Field Sample	71-43-2	Benzene	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	56-55-3	Benzo(a)anthracene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	50-32-8	Benzo(a)pyrene	34	J	10	ug/kg
R2AM1S		11/14/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	7440-41-7	Beryllium	0.56	U	0.56	mg/kg
R2AM1S		11/14/2002	Field Sample	319-85-7	beta-BHC	2.4	UJ	2.4	ug/kg
R2AM1S		11/14/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	58	J	10	ug/kg
R2AM1S		11/14/2002	Field Sample	75-27-4	Bromodichloromethane	2.8	U	2.8	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM1S		11/14/2002	Field Sample	75-25-2	Bromoform	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	74-83-9	Bromomethane	5.5	U	5.5	ug/kg
R2AM1S		11/14/2002	Field Sample	7440-43-9	Cadmium	0.64	UJ	0.64	mg/kg
R2AM1S		11/14/2002	Field Sample	7440-70-2	Calcium	8700	J	1.1	mg/kg
R2AM1S		11/14/2002	Field Sample	86-74-8	Carbazole	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	75-15-0	Carbon Disulfide	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	108-90-7	Chlorobenzene	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	124-48-1	Chlorodibromomethane	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	75-00-3	Chloroethane	5.5	U	5.5	ug/kg
R2AM1S		11/14/2002	Field Sample	67-66-3	Chloroform	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	74-87-3	Chloromethane	5.5	UJ	5.5	ug/kg
R2AM1S		11/14/2002	Field Sample	7440-47-3	Chromium	8.6		0.01	mg/kg
R2AM1S		11/14/2002	Field Sample	218-01-9	Chrysene	25	J	10	ug/kg
R2AM1S		11/14/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	7440-48-4	Cobalt	5.2		0.01	mg/kg
R2AM1S		11/14/2002	Field Sample	7440-50-8	Copper	7.6		0.01	mg/kg
R2AM1S		11/14/2002	Field Sample	75-99-0	Dalapon	2800	R	2800	ug/kg
R2AM1S		11/14/2002	Field Sample	2051-24-3	Decachlorobiphenyl	24	U	24	ug/kg
R2AM1S		11/14/2002	Field Sample	319-86-8	delta-BHC	2.4	UJ	2.4	ug/kg
R2AM1S		11/14/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	132-64-9	Dibenzofuran	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	1918-00-9	Dicamba	28	U	28	ug/kg
R2AM1S		11/14/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.6	U	4.6	ug/kg
R2AM1S		11/14/2002	Field Sample	75-09-2	Dichloromethane	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	120-36-5	Dichlorprop	140	U	140	ug/kg
R2AM1S		11/14/2002	Field Sample	60-57-1	Dieldrin	4.6	UJ	4.6	ug/kg
R2AM1S		11/14/2002	Field Sample	84-66-2	Diethyl Phthalate	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	131-11-3	Dimethyl Phthalate	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	84-74-2	Di-n-butylphthalate	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	117-84-0	Di-n-octylphthalate	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	88-85-7	Dinoseb	460	UJ	460	ug/kg
R2AM1S		11/14/2002	Field Sample	959-98-8	Endosulfan I	2.4	UJ	2.4	ug/kg
R2AM1S		11/14/2002	Field Sample	33213-65-9	Endosulfan II	4.6	UJ	4.6	ug/kg
R2AM1S		11/14/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.6	UJ	4.6	ug/kg
R2AM1S		11/14/2002	Field Sample	72-20-8	Endrin	4.6	UJ	4.6	ug/kg
R2AM1S		11/14/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.6	UJ	4.6	ug/kg
R2AM1S		11/14/2002	Field Sample	53494-70-5	Endrin Ketone	4.6	UJ	4.6	ug/kg
R2AM1S		11/14/2002	Field Sample	100-41-4	Ethylbenzene	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	206-44-0	Fluoranthene	36	J	10	ug/kg
R2AM1S		11/14/2002	Field Sample	86-73-7	Fluorene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.4	UJ	2.4	ug/kg
R2AM1S		11/14/2002	Field Sample	5103-74-2	gamma-Chlordane	2.4	UJ	2.4	ug/kg
R2AM1S		11/14/2002	Field Sample	76-44-8	Heptachlor	2.4	UJ	2.4	ug/kg
R2AM1S		11/14/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.4	UJ	2.4	ug/kg
R2AM1S		11/14/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	14	U	14	ug/kg
R2AM1S		11/14/2002	Field Sample	118-74-1	Hexachlorobenzene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	9.4	U	9.4	ug/kg
R2AM1S		11/14/2002	Field Sample	87-68-3	Hexachlorobutadiene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	67-72-1	Hexachloroethane	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	7439-89-6	Iron	9800		0.05	mg/kg
R2AM1S		11/14/2002	Field Sample	78-59-1	Isophorone	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	7439-92-1	Lead	10	J	0.005	mg/kg
R2AM1S		11/14/2002	Field Sample	7439-95-4	Magnesium	3100		47	mg/kg
R2AM1S		11/14/2002	Field Sample	7439-96-5	Manganese	400		0.01	mg/kg
R2AM1S		11/14/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2800	U	2800	ug/kg
R2AM1S		11/14/2002	Field Sample	93-65-2	MCPP	2800	U	2800	ug/kg
R2AM1S		11/14/2002	Field Sample	7439-97-6	Mercury	0.022	J	0.017	mg/kg
R2AM1S		11/14/2002	Field Sample	72-43-5	Methoxychlor	24	UJ	24	ug/kg
R2AM1S		11/14/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	14	U	14	ug/kg
R2AM1S		11/14/2002	Field Sample	C-MONOCHLOR	Monochlorobiphenyl	4.6	U	4.6	ug/kg
R2AM1S		11/14/2002	Field Sample	91-20-3	Naphthalene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	7440-02-0	Nickel	11		0.04	mg/kg
R2AM1S		11/14/2002	Field Sample	98-95-3	Nitrobenzene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	24	U	24	ug/kg
R2AM1S		11/14/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	14	U	14	ug/kg
R2AM1S		11/14/2002	Field Sample	106-47-8	P-Chloroaniline	930	U	930	ug/kg
R2AM1S		11/14/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	9.4	U	9.4	ug/kg
R2AM1S		11/14/2002	Field Sample	87-86-5	Pentachlorophenol	24	U	24	ug/kg
R2AM1S		11/14/2002	Field Sample	PH	pH	7		1	units
R2AM1S		11/14/2002	Field Sample	85-01-8	Phenanthrene	25	J	10	ug/kg
R2AM1S		11/14/2002	Field Sample	108-95-2	Phenol	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	100-01-6	P-Nitroaniline	2400	U	2400	ug/kg
R2AM1S		11/14/2002	Field Sample	7440-09-7	Potassium	650		94	mg/kg
R2AM1S		11/14/2002	Field Sample	129-00-0	Pyrene	460	U	460	ug/kg
R2AM1S		11/14/2002	Field Sample	7782-49-2	Selenium	1.3	U	1.3	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM1S		11/14/2002	Field Sample	7440-22-4	Silver	1.3	UJ	1.3	mg/kg
R2AM1S		11/14/2002	Field Sample	7440-23-5	Sodium	76		100	mg/kg
R2AM1S		11/14/2002	Field Sample	100-42-5	Styrene (Monomer)	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	9.4	U	9.4	ug/kg
R2AM1S		11/14/2002	Field Sample	127-18-4	Tetrachloroethene	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	7440-28-0	Thallium	1.3	U	1.3	mg/kg
R2AM1S		11/14/2002	Field Sample	108-88-3	Toluene	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	E-10195	Total Organic Carbon	14000		500	mg/kg
R2AM1S		11/14/2002	Field Sample	8001-35-2	Toxaphene	240	UJ	240	ug/kg
R2AM1S		11/14/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.6	U	4.6	ug/kg
R2AM1S		11/14/2002	Field Sample	79-01-6	Trichloroethylene	2.8	U	2.8	ug/kg
R2AM1S		11/14/2002	Field Sample	7440-62-2	Vanadium	13		0.01	mg/kg
R2AM1S		11/14/2002	Field Sample	75-01-4	Vinyl chloride	5.5	U	5.5	ug/kg
R2AM1S		11/14/2002	Field Sample	1330-20-7	Xylenes, Total	3.4	J	11	ug/kg
R2AM1S		11/14/2002	Field Sample	7440-66-6	Zinc	40		0.02	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	71-55-6	1,1,1-Trichloroethane	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	79-34-5	1,1,2,2-Tetrachloroethane	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	79-00-5	1,1,2-Trichloroethane	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	75-34-3	1,1-Dichloroethane	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	75-35-4	1,1-Dichloroethylene	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	120-82-1	1,2,4-Trichlorobenzene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	95-50-1	1,2-Dichlorobenzene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	107-06-2	1,2-Dichloroethane	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	540-59-0	1,2-Dichloroethene (total)	7	U	7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	78-87-5	1,2-Dichloropropane	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	541-73-1	1,3-Dichlorobenzene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	106-46-7	1,4-Dichlorobenzene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	93-76-5	2,4,5-T	12	U	12	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	93-72-1	2,4,5-TP (Silvex)	12	U	12	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	95-95-4	2,4,5-Trichlorophenol	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	88-06-2	2,4,6-Trichlorophenol	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	94-75-7	2,4-D	12	UJ	12	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	94-82-6	2,4-DB	12	U	12	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	120-83-2	2,4-Dichlorophenol	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	105-67-9	2,4-Dimethylphenol	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	51-28-5	2,4-Dinitrophenol	2400	U	2400	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	121-14-2	2,4-Dinitrotoluene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	606-20-2	2,6-Dinitrotoluene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	78-93-3	2-Butanone (MEK)	18	U	18	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	91-58-7	2-Chloronaphthalene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	95-57-8	2-Chlorophenol	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	91-57-6	2-Methylnaphthalene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	95-48-7	2-Methylphenol (o-Cresol)	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	88-74-4	2-Nitroaniline	2400	U	2400	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	88-75-5	2-Nitrophenol	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	91-94-1	3,3'-Dichlorobenzidine	940	U	940	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	99-09-2	3-Nitroaniline	2400	U	2400	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	72-54-8	4,4'-DDD	4.7	U	4.7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	72-55-9	4,4'-DDE	0.56	R	0.1	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	50-29-3	4,4'-DDT	4.7	UJ	4.7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	534-52-1	4,6-Dinitro-2-methylphenol	2400	U	2400	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	101-55-3	4-Bromophenyl Phenyl Ether	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	59-50-7	4-Chloro-3-methylphenol	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7005-72-3	4-Chlorophenyl Phenyl Ether	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	108-10-1	4-Methyl-2-pentanone (MIBK)	18	U	18	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	100-02-7	4-Nitrophenol	2400	U	2400	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	83-32-9	Acenaphthene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	208-96-8	Acenaphthylene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	67-64-1	Acetone	3.5	J	18	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	309-00-2	Aldrin	2.4	U	2.4	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	319-84-6	alpha-BHC	2.4	U	2.4	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	5103-71-9	alpha-Chlordane	2.4	U	2.4	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7429-90-5	Aluminum	4200	J	0.02	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	120-12-7	Anthracene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-36-0	Antimony	2.86	U	2.86	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-38-2	Arsenic	4.6		0.01	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-39-3	Barium	130		0.94	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	71-43-2	Benzene	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	56-55-3	Benzo(a)anthracene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	50-32-8	Benzo(a)pyrene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	205-99-2	Benzo(b)fluoranthene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	191-24-2	Benzo(g,h,i)perylene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	207-08-9	Benzo(k)fluoranthene	35	J	10	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	85-68-7	Benzyl Butyl Phthalate	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-41-7	Beryllium	0.57	U	0.57	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	319-85-7	beta-BHC	2.4	U	2.4	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	111-91-1	bis(2-Chloroethoxy)methane	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	111-44-4	bis(2-Chloroethyl)ether	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	117-81-7	bis(2-Ethylhexyl)phthalate	83	J	10	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	75-27-4	Bromodichloromethane	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	75-25-2	Bromoform	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	74-83-9	Bromomethane	7	U	7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-43-9	Cadmium	0.71	UJ	0.71	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-70-2	Calcium	9200	J	1.1	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	86-74-8	Carbazole	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	75-15-0	Carbon Disulfide	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	56-23-5	Carbon Tetrachloride	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	108-90-7	Chlorobenzene	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	124-48-1	Chlorodibromomethane	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	75-00-3	Chloroethane	7	U	7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	67-66-3	Chloroform	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	74-87-3	Chloromethane	7	UJ	7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-47-3	Chromium	9.1		0.01	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	218-01-9	Chrysene	35	J	10	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	10061-01-5	cis-1,3-Dichloropropene	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-48-4	Cobalt	5.4		0.01	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-50-8	Copper	8.4		0.01	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	75-99-0	Dalapon	2800	R	2800	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	2051-24-3	Decachlorobiphenyl	24	U	24	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	319-86-8	delta-BHC	2.4	U	2.4	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	53-70-3	Dibenzo(a,h)anthracene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	132-64-9	Dibenzofuran	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	1918-00-9	Dicamba	28	U	28	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	C-DICHLOROBI	Dichlorobiphenyl	4.7	U	4.7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	75-09-2	Dichloromethane	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	120-36-5	Dichlorprop	140	U	140	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	60-57-1	Dieldrin	4.7	U	4.7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	84-66-2	Diethyl Phthalate	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	131-11-3	Dimethyl Phthalate	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	84-74-2	Di-n-butylphthalate	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	117-84-0	Di-n-octylphthalate	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	88-85-7	Dinoseb	470	UJ	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	959-98-8	Endosulfan I	2.4	U	2.4	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	33213-65-9	Endosulfan II	4.7	U	4.7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	1031-07-8	Endosulfan Sulfate	4.7	U	4.7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	72-20-8	Endrin	4.7	U	4.7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7421-93-4	Endrin Aldehyde	4.7	U	4.7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	53494-70-5	Endrin Ketone	4.7	U	4.7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	100-41-4	Ethylbenzene	1.5	J	0.83	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	206-44-0	Fluoranthene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	86-73-7	Fluorene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	58-89-9	gamma-BHC (Lindane)	2.4	U	2.4	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	5103-74-2	gamma-Chlordane	2.4	U	2.4	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	76-44-8	Heptachlor	2.4	U	2.4	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	1024-57-3	Heptachlor Epoxide	2.4	U	2.4	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	C-HEPTACHLOR	Heptachlorobiphenyl	14	U	14	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	118-74-1	Hexachlorobenzene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	C-HEXACHLORO	Hexachlorobiphenyl	9.6	U	9.6	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	87-68-3	Hexachlorobutadiene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	77-47-4	Hexachlorocyclopentadiene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	67-72-1	Hexachloroethane	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	193-39-5	Indeno(1,2,3-cd)pyrene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7439-89-6	Iron	10000		0.05	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	78-59-1	Isophorone	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7439-92-1	Lead	11	J	0.005	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7439-95-4	Magnesium	3300		47	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7439-96-5	Manganese	420		0.01	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2800	U	2800	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	93-65-2	MCPP	2800	U	2800	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7439-97-6	Mercury	0.026	J	0.017	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	72-43-5	Methoxychlor	24	UJ	24	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	591-78-6	Methyl N-Butyl Ketone	18	U	18	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	C-MONOCHLOR(	Monochlorobiphenyl	4.7	U	4.7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	91-20-3	Naphthalene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-02-0	Nickel	11		0.04	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	98-95-3	Nitrobenzene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	621-64-7	N-Nitroso-di-n-propylamine	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	86-30-6	N-Nitrosodiphenylamine	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	C-NONACHLORO	Nonachlorobiphenyl	24	U	24	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	C-OCTA-BIPHE	Octachlorobiphenyl	14	U	14	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	106-47-8	P-Chloroaniline	940	U	940	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	C-PENTBIPHEN	Pentachlorobiphenyl	9.6	U	9.6	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	87-86-5	Pentachlorophenol	24	U	24	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	PH	pH	7.3		1	units
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	85-01-8	Phenanthrene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	108-95-2	Phenol	470	U	470	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	100-01-6	P-Nitroaniline	2400	U	2400	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-09-7	Potassium	710		94	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	129-00-0	Pyrene	470	U	470	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7782-49-2	Selenium	1.4	U	1.4	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-22-4	Silver	1.4	UJ	1.4	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-23-5	Sodium	83		100	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	100-42-5	Styrene (Monomer)	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	C-TETRACHLOR	Tetrachlorobiphenyl	9.6	U	9.6	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	127-18-4	Tetrachloroethene	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-28-0	Thallium	1.4	U	1.4	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	108-88-3	Toluene	1.5	J	1	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	E-10195	Total Organic Carbon	11000		500	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	8001-35-2	Toxaphene	240	U	240	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	10061-02-6	trans-1,3-Dichloropropene	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	C-TRICHLOROB	Trichlorobiphenyl	4.7	U	4.7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	79-01-6	Trichloroethylene	3.5	U	3.5	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-62-2	Vanadium	14		0.01	mg/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	75-01-4	Vinyl chloride	7	U	7	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	1330-20-7	Xylenes, Total	8.5		11	ug/kg
R2AM2S	R2AM1S	11/14/2002	Field Duplicate	7440-66-6	Zinc	41		0.02	mg/kg
R2BM1S		11/14/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.0014	U	0.0014	ug/kg
R2BM1S		11/14/2002	Field Sample	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.00059	U	0.00059	ug/kg
R2BM1S		11/14/2002	Field Sample	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.00065	U	0.00065	ug/kg
R2BM1S		11/14/2002	Field Sample	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.0011	U	0.0011	ug/kg
R2BM1S		11/14/2002	Field Sample	70648-26-9	1,2,3,4,7,8-HxCDF	0.00092	U	0.00092	ug/kg
R2BM1S		11/14/2002	Field Sample	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.0011	U	0.0011	ug/kg
R2BM1S		11/14/2002	Field Sample	57117-44-9	1,2,3,6,7,8-HxCDF	0.00092	U	0.00092	ug/kg
R2BM1S		11/14/2002	Field Sample	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.0011	U	0.0011	ug/kg
R2BM1S		11/14/2002	Field Sample	72918-21-9	1,2,3,7,8,9-HxCDF	0.0012	U	0.0012	ug/kg
R2BM1S		11/14/2002	Field Sample	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	0.00066	U	0.00066	ug/kg
R2BM1S		11/14/2002	Field Sample	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.0012	U	0.0012	ug/kg
R2BM1S		11/14/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	5.3	U	5.3	ug/kg
R2BM1S		11/14/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	60851-34-5	2,3,4,6,7,8-HxCDF	0.001	U	0.001	ug/kg
R2BM1S		11/14/2002	Field Sample	57117-31-4	2,3,4,7,8-PeCDF	0.00066	U	0.00066	ug/kg
R2BM1S		11/14/2002	Field Sample	1746-01-6	2,3,7,8-TCDD	0.00048	U	0.00048	ug/kg
R2BM1S		11/14/2002	Field Sample	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	0.00031	U	0.00031	ug/kg
R2BM1S		11/14/2002	Field Sample	93-76-5	2,4,5-T	11	U	11	ug/kg
R2BM1S		11/14/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	11	U	11	ug/kg
R2BM1S		11/14/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	94-75-7	2,4-D	11	UJ	11	ug/kg
R2BM1S		11/14/2002	Field Sample	94-82-6	2,4-DB	11	U	11	ug/kg
R2BM1S		11/14/2002	Field Sample	120-83-2	2,4-Dichlorophenol	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	105-67-9	2,4-Dimethylphenol	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2200	R	2200	ug/kg
R2BM1S		11/14/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	78-93-3	2-Butanone (MEK)	13	U	13	ug/kg
R2BM1S		11/14/2002	Field Sample	91-58-7	2-Chloronaphthalene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	95-57-8	2-Chlorophenol	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	91-57-6	2-Methylnaphthalene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	88-74-4	2-Nitroaniline	2200	R	2200	ug/kg
R2BM1S		11/14/2002	Field Sample	88-75-5	2-Nitrophenol	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	850	R	850	ug/kg
R2BM1S		11/14/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	99-09-2	3-Nitroaniline	2200	R	2200	ug/kg
R2BM1S		11/14/2002	Field Sample	72-54-8	4,4'-DDD	4.2	UJ	4.2	ug/kg
R2BM1S		11/14/2002	Field Sample	72-55-9	4,4'-DDE	4.2	UJ	4.2	ug/kg
R2BM1S		11/14/2002	Field Sample	50-29-3	4,4'-DDT	4.2	UJ	4.2	ug/kg
R2BM1S		11/14/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2200	R	2200	ug/kg
R2BM1S		11/14/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	13	ug/kg
R2BM1S		11/14/2002	Field Sample	100-02-7	4-Nitrophenol	2200	R	2200	ug/kg
R2BM1S		11/14/2002	Field Sample	83-32-9	Acenaphthene	420	R	420	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2BM1S		11/14/2002	Field Sample	208-96-8	Acenaphthylene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	67-64-1	Acetone	3.3	J	18	ug/kg
R2BM1S		11/14/2002	Field Sample	309-00-2	Aldrin	2.2	UJ	2.2	ug/kg
R2BM1S		11/14/2002	Field Sample	319-84-6	alpha-BHC	2.2	UJ	2.2	ug/kg
R2BM1S		11/14/2002	Field Sample	5103-71-9	alpha-Chlordane	2.2	UJ	2.2	ug/kg
R2BM1S		11/14/2002	Field Sample	7429-90-5	Aluminum	960	J	0.02	mg/kg
R2BM1S		11/14/2002	Field Sample	120-12-7	Anthracene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	7440-36-0	Antimony	2.6	U	2.6	mg/kg
R2BM1S		11/14/2002	Field Sample	7440-38-2	Arsenic	2		0.01	mg/kg
R2BM1S		11/14/2002	Field Sample	7440-39-3	Barium	36		0.94	mg/kg
R2BM1S		11/14/2002	Field Sample	71-43-2	Benzene	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	56-55-3	Benzo(a)anthracene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	50-32-8	Benzo(a)pyrene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	7440-41-7	Beryllium	0.51	U	0.51	mg/kg
R2BM1S		11/14/2002	Field Sample	319-85-7	beta-BHC	2.2	UJ	2.2	ug/kg
R2BM1S		11/14/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	75-27-4	Bromodichloromethane	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	75-25-2	Bromoform	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	74-83-9	Bromomethane	5.3	U	5.3	ug/kg
R2BM1S		11/14/2002	Field Sample	7440-43-9	Cadmium	0.58	UJ	0.58	mg/kg
R2BM1S		11/14/2002	Field Sample	7440-70-2	Calcium	2200	J	1.1	mg/kg
R2BM1S		11/14/2002	Field Sample	86-74-8	Carbazole	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	75-15-0	Carbon Disulfide	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	108-90-7	Chlorobenzene	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	124-48-1	Chlorodibromomethane	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	75-00-3	Chloroethane	5.3	U	5.3	ug/kg
R2BM1S		11/14/2002	Field Sample	67-66-3	Chloroform	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	74-87-3	Chloromethane	5.3	UJ	5.3	ug/kg
R2BM1S		11/14/2002	Field Sample	7440-47-3	Chromium	6.3		0.01	mg/kg
R2BM1S		11/14/2002	Field Sample	218-01-9	Chrysene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	7440-48-4	Cobalt	2.1		0.01	mg/kg
R2BM1S		11/14/2002	Field Sample	7440-50-8	Copper	0.88	J	0.01	mg/kg
R2BM1S		11/14/2002	Field Sample	75-99-0	Dalapon	2600	R	2600	ug/kg
R2BM1S		11/14/2002	Field Sample	2051-24-3	Decachlorobiphenyl	22	U	22	ug/kg
R2BM1S		11/14/2002	Field Sample	319-86-8	delta-BHC	2.2	UJ	2.2	ug/kg
R2BM1S		11/14/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	132-64-9	Dibenzofuran	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	1918-00-9	Dicamba	26	U	26	ug/kg
R2BM1S		11/14/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.2	U	4.2	ug/kg
R2BM1S		11/14/2002	Field Sample	75-09-2	Dichloromethane	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	120-36-5	Dichlorprop	130	U	130	ug/kg
R2BM1S		11/14/2002	Field Sample	60-57-1	Dieldrin	4.2	UJ	4.2	ug/kg
R2BM1S		11/14/2002	Field Sample	84-66-2	Diethyl Phthalate	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	131-11-3	Dimethyl Phthalate	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	84-74-2	Di-n-butylphthalate	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	117-84-0	Di-n-octylphthalate	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	88-85-7	Dinoseb	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	959-98-8	Endosulfan I	2.2	UJ	2.2	ug/kg
R2BM1S		11/14/2002	Field Sample	33213-65-9	Endosulfan II	4.2	UJ	4.2	ug/kg
R2BM1S		11/14/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.2	UJ	4.2	ug/kg
R2BM1S		11/14/2002	Field Sample	72-20-8	Endrin	4.2	UJ	4.2	ug/kg
R2BM1S		11/14/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.2	UJ	4.2	ug/kg
R2BM1S		11/14/2002	Field Sample	53494-70-5	Endrin Ketone	1.2	J	0.1	ug/kg
R2BM1S		11/14/2002	Field Sample	100-41-4	Ethylbenzene	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	206-44-0	Fluoranthene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	86-73-7	Fluorene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.2	UJ	2.2	ug/kg
R2BM1S		11/14/2002	Field Sample	5103-74-2	gamma-Chlordane	2.2	UJ	2.2	ug/kg
R2BM1S		11/14/2002	Field Sample	76-44-8	Heptachlor	2.2	UJ	2.2	ug/kg
R2BM1S		11/14/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.2	UJ	2.2	ug/kg
R2BM1S		11/14/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	13	U	13	ug/kg
R2BM1S		11/14/2002	Field Sample	118-74-1	Hexachlorobenzene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.6	U	8.6	ug/kg
R2BM1S		11/14/2002	Field Sample	87-68-3	Hexachlorobutadiene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	67-72-1	Hexachloroethane	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	7439-89-6	Iron	3800		0.05	mg/kg
R2BM1S		11/14/2002	Field Sample	78-59-1	Isophorone	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	7439-92-1	Lead	19	J	0.005	mg/kg
R2BM1S		11/14/2002	Field Sample	7439-95-4	Magnesium	960		47	mg/kg
R2BM1S		11/14/2002	Field Sample	7439-96-5	Manganese	68		0.01	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2BM1S		11/14/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2600	U	2600	ug/kg
R2BM1S		11/14/2002	Field Sample	93-65-2	MCPP	2600	U	2600	ug/kg
R2BM1S		11/14/2002	Field Sample	7439-97-6	Mercury	0.0043	J	0.017	mg/kg
R2BM1S		11/14/2002	Field Sample	72-43-5	Methoxychlor	22	UJ	22	ug/kg
R2BM1S		11/14/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	13	U	13	ug/kg
R2BM1S		11/14/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	4.2	U	4.2	ug/kg
R2BM1S		11/14/2002	Field Sample	91-20-3	Naphthalene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	7440-02-0	Nickel	4.7		0.04	mg/kg
R2BM1S		11/14/2002	Field Sample	98-95-3	Nitrobenzene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	C-NONACHLOR(	Nonachlorobiphenyl	22	U	22	ug/kg
R2BM1S		11/14/2002	Field Sample	3268-87-9	OCDD	0.024	J	0.000033	ug/kg
R2BM1S		11/14/2002	Field Sample	39001-02-0	OCDF	0.0012	U	0.0012	ug/kg
R2BM1S		11/14/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	13	U	13	ug/kg
R2BM1S		11/14/2002	Field Sample	106-47-8	P-Chloroaniline	850	R	850	ug/kg
R2BM1S		11/14/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.6	U	8.6	ug/kg
R2BM1S		11/14/2002	Field Sample	87-86-5	Pentachlorophenol	22	U	22	ug/kg
R2BM1S		11/14/2002	Field Sample	MOIST	Percent Moisture	22.5		1	%
R2BM1S		11/14/2002	Field Sample	PH	pH	7.4		1	units
R2BM1S		11/14/2002	Field Sample	85-01-8	Phenanthrene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	108-95-2	Phenol	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	100-01-6	P-Nitroaniline	2200	R	2200	ug/kg
R2BM1S		11/14/2002	Field Sample	7440-09-7	Potassium	240		94	mg/kg
R2BM1S		11/14/2002	Field Sample	129-00-0	Pyrene	420	R	420	ug/kg
R2BM1S		11/14/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R2BM1S		11/14/2002	Field Sample	7440-22-4	Silver	1.2	UJ	1.2	mg/kg
R2BM1S		11/14/2002	Field Sample	7440-23-5	Sodium	44	J	100	mg/kg
R2BM1S		11/14/2002	Field Sample	100-42-5	Styrene (Monomer)	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.6	U	8.6	ug/kg
R2BM1S		11/14/2002	Field Sample	127-18-4	Tetrachloroethene	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	7440-28-0	Thallium	1.2	U	1.2	mg/kg
R2BM1S		11/14/2002	Field Sample	108-88-3	Toluene	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	37871-00-4	Total HpCDD	0.0014	U	0.0014	ug/kg
R2BM1S		11/14/2002	Field Sample	38998-75-3	Total HpCDF	0.00065	U	0.00065	ug/kg
R2BM1S		11/14/2002	Field Sample	34465-46-8	Total HxCDD	0.0011	U	0.0011	ug/kg
R2BM1S		11/14/2002	Field Sample	55684-94-1	Total HxCDF	0.0012	U	0.0012	ug/kg
R2BM1S		11/14/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R2BM1S		11/14/2002	Field Sample	36088-22-9	Total PeCDD	0.0012	U	0.0012	ug/kg
R2BM1S		11/14/2002	Field Sample	30402-15-4	Total PeCDF	0.00066	U	0.00066	ug/kg
R2BM1S		11/14/2002	Field Sample	41903-57-5	Total TCDD	0.00048	U	0.00048	ug/kg
R2BM1S		11/14/2002	Field Sample	55722-27-5	Total TCDF	0.00031	U	0.00031	ug/kg
R2BM1S		11/14/2002	Field Sample	8001-35-2	Toxaphene	220	UJ	220	ug/kg
R2BM1S		11/14/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.2	U	4.2	ug/kg
R2BM1S		11/14/2002	Field Sample	79-01-6	Trichloroethylene	2.7	U	2.7	ug/kg
R2BM1S		11/14/2002	Field Sample	7440-62-2	Vanadium	4.5		0.01	mg/kg
R2BM1S		11/14/2002	Field Sample	75-01-4	Vinyl chloride	5.3	U	5.3	ug/kg
R2BM1S		11/14/2002	Field Sample	1330-20-7	Xylenes, Total	2.5	J	11	ug/kg
R2BM1S		11/14/2002	Field Sample	7440-66-6	Zinc	10		0.02	mg/kg
R2CM1S		11/14/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	75-34-3	1,1-Dichloroethane	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	75-35-4	1,1-Dichloroethylene	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	107-06-2	1,2-Dichloroethane	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	6	U	6	ug/kg
R2CM1S		11/14/2002	Field Sample	78-87-5	1,2-Dichloropropane	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	93-76-5	2,4,5-T	8.6	U	8.6	ug/kg
R2CM1S		11/14/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	8.6	U	8.6	ug/kg
R2CM1S		11/14/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	94-75-7	2,4-D	8.6	UJ	8.6	ug/kg
R2CM1S		11/14/2002	Field Sample	94-82-6	2,4-DB	8.6	U	8.6	ug/kg
R2CM1S		11/14/2002	Field Sample	120-83-2	2,4-Dichlorophenol	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	105-67-9	2,4-Dimethylphenol	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	51-28-5	2,4-Dinitrophenol	1800	U	1800	ug/kg
R2CM1S		11/14/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	78-93-3	2-Butanone (MEK)	15	U	15	ug/kg
R2CM1S		11/14/2002	Field Sample	91-58-7	2-Chloronaphthalene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	95-57-8	2-Chlorophenol	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	91-57-6	2-Methylnaphthalene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	340	U	340	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2CM1S		11/14/2002	Field Sample	88-74-4	2-Nitroaniline	1800	U	1800	ug/kg
R2CM1S		11/14/2002	Field Sample	88-75-5	2-Nitrophenol	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	690	U	690	ug/kg
R2CM1S		11/14/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	99-09-2	3-Nitroaniline	1800	U	1800	ug/kg
R2CM1S		11/14/2002	Field Sample	72-54-8	4,4'-DDD	3.4	U	3.4	ug/kg
R2CM1S		11/14/2002	Field Sample	72-55-9	4,4'-DDE	3.4	U	3.4	ug/kg
R2CM1S		11/14/2002	Field Sample	50-29-3	4,4'-DDT	3.4	U	3.4	ug/kg
R2CM1S		11/14/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	1800	U	1800	ug/kg
R2CM1S		11/14/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	15	U	15	ug/kg
R2CM1S		11/14/2002	Field Sample	100-02-7	4-Nitrophenol	1800	U	1800	ug/kg
R2CM1S		11/14/2002	Field Sample	83-32-9	Acenaphthene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	208-96-8	Acenaphthylene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	67-64-1	Acetone	30	U	30	ug/kg
R2CM1S		11/14/2002	Field Sample	309-00-2	Aldrin	1.8	U	1.8	ug/kg
R2CM1S		11/14/2002	Field Sample	319-84-6	alpha-BHC	1.8	U	1.8	ug/kg
R2CM1S		11/14/2002	Field Sample	5103-71-9	alpha-Chlordane	1.8	U	1.8	ug/kg
R2CM1S		11/14/2002	Field Sample	7429-90-5	Aluminum	780	J	0.02	mg/kg
R2CM1S		11/14/2002	Field Sample	120-12-7	Anthracene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	7440-36-0	Antimony	1.9	U	1.9	mg/kg
R2CM1S		11/14/2002	Field Sample	7440-38-2	Arsenic	1.4		0.01	mg/kg
R2CM1S		11/14/2002	Field Sample	7440-39-3	Barium	22		0.94	mg/kg
R2CM1S		11/14/2002	Field Sample	71-43-2	Benzene	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	56-55-3	Benzo(a)anthracene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	50-32-8	Benzo(a)pyrene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	7440-41-7	Beryllium	0.42	U	0.42	mg/kg
R2CM1S		11/14/2002	Field Sample	319-85-7	beta-BHC	1.8	U	1.8	ug/kg
R2CM1S		11/14/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	75-27-4	Bromodichloromethane	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	75-25-2	Bromoform	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	74-83-9	Bromomethane	6	U	6	ug/kg
R2CM1S		11/14/2002	Field Sample	7440-43-9	Cadmium	0.47	UJ	0.47	mg/kg
R2CM1S		11/14/2002	Field Sample	7440-70-2	Calcium	790	J	1.1	mg/kg
R2CM1S		11/14/2002	Field Sample	86-74-8	Carbazole	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	75-15-0	Carbon Disulfide	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	56-23-5	Carbon Tetrachloride	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	108-90-7	Chlorobenzene	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	124-48-1	Chlorodibromomethane	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	75-00-3	Chloroethane	6	U	6	ug/kg
R2CM1S		11/14/2002	Field Sample	67-66-3	Chloroform	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	74-87-3	Chloromethane	6	UJ	6	ug/kg
R2CM1S		11/14/2002	Field Sample	7440-47-3	Chromium	2.7		0.01	mg/kg
R2CM1S		11/14/2002	Field Sample	218-01-9	Chrysene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	7440-48-4	Cobalt	3.2		0.01	mg/kg
R2CM1S		11/14/2002	Field Sample	7440-50-8	Copper	0.68	J	0.01	mg/kg
R2CM1S		11/14/2002	Field Sample	75-99-0	Dalapon	2100	R	2100	ug/kg
R2CM1S		11/14/2002	Field Sample	2051-24-3	Decachlorobiphenyl	18	U	18	ug/kg
R2CM1S		11/14/2002	Field Sample	319-86-8	delta-BHC	1.8	U	1.8	ug/kg
R2CM1S		11/14/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	132-64-9	Dibenzofuran	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	1918-00-9	Dicamba	21	U	21	ug/kg
R2CM1S		11/14/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	3.4	U	3.4	ug/kg
R2CM1S		11/14/2002	Field Sample	75-09-2	Dichloromethane	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	120-36-5	Dichlorprop	100	U	100	ug/kg
R2CM1S		11/14/2002	Field Sample	60-57-1	Dieldrin	3.4	U	3.4	ug/kg
R2CM1S		11/14/2002	Field Sample	84-66-2	Diethyl Phthalate	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	131-11-3	Dimethyl Phthalate	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	84-74-2	Di-n-butylphthalate	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	117-84-0	Di-n-octylphthalate	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	88-85-7	Dinoseb	340	UJ	340	ug/kg
R2CM1S		11/14/2002	Field Sample	959-98-8	Endosulfan I	1.8	U	1.8	ug/kg
R2CM1S		11/14/2002	Field Sample	33213-65-9	Endosulfan II	3.4	U	3.4	ug/kg
R2CM1S		11/14/2002	Field Sample	1031-07-8	Endosulfan Sulfate	3.4	U	3.4	ug/kg
R2CM1S		11/14/2002	Field Sample	72-20-8	Endrin	3.4	U	3.4	ug/kg
R2CM1S		11/14/2002	Field Sample	7421-93-4	Endrin Aldehyde	3.4	U	3.4	ug/kg
R2CM1S		11/14/2002	Field Sample	53494-70-5	Endrin Ketone	3.4	U	3.4	ug/kg
R2CM1S		11/14/2002	Field Sample	100-41-4	Ethylbenzene	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	206-44-0	Fluoranthene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	86-73-7	Fluorene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	1.8	U	1.8	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2CM1S		11/14/2002	Field Sample	5103-74-2	gamma-Chlordane	1.8	U	1.8	ug/kg
R2CM1S		11/14/2002	Field Sample	76-44-8	Heptachlor	1.8	U	1.8	ug/kg
R2CM1S		11/14/2002	Field Sample	1024-57-3	Heptachlor Epoxide	1.8	U	1.8	ug/kg
R2CM1S		11/14/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	10	U	10	ug/kg
R2CM1S		11/14/2002	Field Sample	118-74-1	Hexachlorobenzene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	7	U	7	ug/kg
R2CM1S		11/14/2002	Field Sample	87-68-3	Hexachlorobutadiene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	67-72-1	Hexachloroethane	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	7439-89-6	Iron	3200		0.05	mg/kg
R2CM1S		11/14/2002	Field Sample	78-59-1	Isophorone	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	7439-92-1	Lead	2	J	0.005	mg/kg
R2CM1S		11/14/2002	Field Sample	7439-95-4	Magnesium	540		47	mg/kg
R2CM1S		11/14/2002	Field Sample	7439-96-5	Manganese	150		0.01	mg/kg
R2CM1S		11/14/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2100	U	2100	ug/kg
R2CM1S		11/14/2002	Field Sample	93-65-2	MCPP	2100	U	2100	ug/kg
R2CM1S		11/14/2002	Field Sample	7439-97-6	Mercury	0.019	U	0.019	mg/kg
R2CM1S		11/14/2002	Field Sample	72-43-5	Methoxychlor	18	U	18	ug/kg
R2CM1S		11/14/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	15	U	15	ug/kg
R2CM1S		11/14/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	3.4	U	3.4	ug/kg
R2CM1S		11/14/2002	Field Sample	91-20-3	Naphthalene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	7440-02-0	Nickel	6.8		0.04	mg/kg
R2CM1S		11/14/2002	Field Sample	98-95-3	Nitrobenzene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	18	U	18	ug/kg
R2CM1S		11/14/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	10	U	10	ug/kg
R2CM1S		11/14/2002	Field Sample	106-47-8	P-Chloroaniline	690	U	690	ug/kg
R2CM1S		11/14/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	7	U	7	ug/kg
R2CM1S		11/14/2002	Field Sample	87-86-5	Pentachlorophenol	18	U	18	ug/kg
R2CM1S		11/14/2002	Field Sample	PH	pH	7.5		1	units
R2CM1S		11/14/2002	Field Sample	85-01-8	Phenanthrene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	108-95-2	Phenol	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	100-01-6	P-Nitroaniline	1800	U	1800	ug/kg
R2CM1S		11/14/2002	Field Sample	7440-09-7	Potassium	140		94	mg/kg
R2CM1S		11/14/2002	Field Sample	129-00-0	Pyrene	340	U	340	ug/kg
R2CM1S		11/14/2002	Field Sample	7782-49-2	Selenium	0.95	U	0.95	mg/kg
R2CM1S		11/14/2002	Field Sample	7440-22-4	Silver	0.95	UJ	0.95	mg/kg
R2CM1S		11/14/2002	Field Sample	7440-23-5	Sodium	26	J	100	mg/kg
R2CM1S		11/14/2002	Field Sample	100-42-5	Styrene (Monomer)	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	7	U	7	ug/kg
R2CM1S		11/14/2002	Field Sample	127-18-4	Tetrachloroethene	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	7440-28-0	Thallium	0.95	U	0.95	mg/kg
R2CM1S		11/14/2002	Field Sample	108-88-3	Toluene	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R2CM1S		11/14/2002	Field Sample	8001-35-2	Toxaphene	180	U	180	ug/kg
R2CM1S		11/14/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	3.4	U	3.4	ug/kg
R2CM1S		11/14/2002	Field Sample	79-01-6	Trichloroethylene	3	U	3	ug/kg
R2CM1S		11/14/2002	Field Sample	7440-62-2	Vanadium	3.9		0.01	mg/kg
R2CM1S		11/14/2002	Field Sample	75-01-4	Vinyl chloride	6	U	6	ug/kg
R2CM1S		11/14/2002	Field Sample	1330-20-7	Xylenes, Total	3.1	J	11	ug/kg
R2CM1S		11/14/2002	Field Sample	7440-66-6	Zinc	8		0.02	mg/kg
R2AD1S		11/13/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	75-34-3	1,1-Dichloroethane	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	75-35-4	1,1-Dichloroethylene	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	107-06-2	1,2-Dichloroethane	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	6	U	6	ug/kg
R2AD1S		11/13/2002	Field Sample	78-87-5	1,2-Dichloropropane	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	93-76-5	2,4,5-T	12	U	12	ug/kg
R2AD1S		11/13/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	12	U	12	ug/kg
R2AD1S		11/13/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	480	U	480	ug/kg
R2AD1S		11/13/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	480	U	480	ug/kg
R2AD1S		11/13/2002	Field Sample	94-75-7	2,4-D	12	UJ	12	ug/kg
R2AD1S		11/13/2002	Field Sample	94-82-6	2,4-DB	12	U	12	ug/kg
R2AD1S		11/13/2002	Field Sample	120-83-2	2,4-Dichlorophenol	480	U	480	ug/kg
R2AD1S		11/13/2002	Field Sample	105-67-9	2,4-Dimethylphenol	480	U	480	ug/kg
R2AD1S		11/13/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
R2AD1S		11/13/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	78-93-3	2-Butanone (MEK)	5	J	8.8	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2AD1S		11/13/2002	Field Sample	91-58-7	2-Chloronaphthalene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	95-57-8	2-Chlorophenol	480	U	480	ug/kg
R2AD1S		11/13/2002	Field Sample	91-57-6	2-Methylnaphthalene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	480	U	480	ug/kg
R2AD1S		11/13/2002	Field Sample	88-74-4	2-Nitroaniline	2500	R	2500	ug/kg
R2AD1S		11/13/2002	Field Sample	88-75-5	2-Nitrophenol	480	U	480	ug/kg
R2AD1S		11/13/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	960	R	960	ug/kg
R2AD1S		11/13/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	480	U	480	ug/kg
R2AD1S		11/13/2002	Field Sample	99-09-2	3-Nitroaniline	2500	R	2500	ug/kg
R2AD1S		11/13/2002	Field Sample	72-54-8	4,4'-DDD	4.8	U	4.8	ug/kg
R2AD1S		11/13/2002	Field Sample	72-55-9	4,4'-DDE	4.8	U	4.8	ug/kg
R2AD1S		11/13/2002	Field Sample	50-29-3	4,4'-DDT	4.8	U	4.8	ug/kg
R2AD1S		11/13/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
R2AD1S		11/13/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	480	U	480	ug/kg
R2AD1S		11/13/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	15	U	15	ug/kg
R2AD1S		11/13/2002	Field Sample	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
R2AD1S		11/13/2002	Field Sample	83-32-9	Acenaphthene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	208-96-8	Acenaphthylene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	67-64-1	Acetone	40	J	18	ug/kg
R2AD1S		11/13/2002	Field Sample	309-00-2	Aldrin	2.5	U	2.5	ug/kg
R2AD1S		11/13/2002	Field Sample	319-84-6	alpha-BHC	2.5	U	2.5	ug/kg
R2AD1S		11/13/2002	Field Sample	5103-71-9	alpha-Chlordane	2.5	U	2.5	ug/kg
R2AD1S		11/13/2002	Field Sample	7429-90-5	Aluminum	6300	J	0.02	mg/kg
R2AD1S		11/13/2002	Field Sample	120-12-7	Anthracene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	7440-36-0	Antimony	2.9	U	2.9	mg/kg
R2AD1S		11/13/2002	Field Sample	7440-38-2	Arsenic	7.5		0.01	mg/kg
R2AD1S		11/13/2002	Field Sample	7440-39-3	Barium	170		0.94	mg/kg
R2AD1S		11/13/2002	Field Sample	71-43-2	Benzene	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	56-55-3	Benzo(a)anthracene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	50-32-8	Benzo(a)pyrene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	7440-41-7	Beryllium	0.54		0.004	mg/kg
R2AD1S		11/13/2002	Field Sample	319-85-7	beta-BHC	2.5	U	2.5	ug/kg
R2AD1S		11/13/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	75-27-4	Bromodichloromethane	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	75-25-2	Bromoform	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	74-83-9	Bromomethane	6	U	6	ug/kg
R2AD1S		11/13/2002	Field Sample	7440-43-9	Cadmium	0.66	UJ	0.66	mg/kg
R2AD1S		11/13/2002	Field Sample	7440-70-2	Calcium	12000	J	1.1	mg/kg
R2AD1S		11/13/2002	Field Sample	86-74-8	Carbazole	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	75-15-0	Carbon Disulfide	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	56-23-5	Carbon Tetrachloride	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	108-90-7	Chlorobenzene	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	124-48-1	Chlorodibromomethane	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	75-00-3	Chloroethane	6	U	6	ug/kg
R2AD1S		11/13/2002	Field Sample	67-66-3	Chloroform	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	74-87-3	Chloromethane	6	UJ	6	ug/kg
R2AD1S		11/13/2002	Field Sample	7440-47-3	Chromium	11		0.01	mg/kg
R2AD1S		11/13/2002	Field Sample	218-01-9	Chrysene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	7440-48-4	Cobalt	6.3		0.01	mg/kg
R2AD1S		11/13/2002	Field Sample	7440-50-8	Copper	14		0.01	mg/kg
R2AD1S		11/13/2002	Field Sample	75-99-0	Dalapon	2900	R	2900	ug/kg
R2AD1S		11/13/2002	Field Sample	2051-24-3	Decachlorobiphenyl	25	U	25	ug/kg
R2AD1S		11/13/2002	Field Sample	319-86-8	delta-BHC	2.5	U	2.5	ug/kg
R2AD1S		11/13/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	132-64-9	Dibenzofuran	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	1918-00-9	Dicamba	29	U	29	ug/kg
R2AD1S		11/13/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.8	U	4.8	ug/kg
R2AD1S		11/13/2002	Field Sample	75-09-2	Dichloromethane	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	120-36-5	Dichlorprop	140	U	140	ug/kg
R2AD1S		11/13/2002	Field Sample	60-57-1	Dieldrin	4.8	U	4.8	ug/kg
R2AD1S		11/13/2002	Field Sample	84-66-2	Diethyl Phthalate	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	131-11-3	Dimethyl Phthalate	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	84-74-2	Di-n-butylphthalate	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	117-84-0	Di-n-octylphthalate	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	88-85-7	Dinoseb	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	959-98-8	Endosulfan I	2.5	U	2.5	ug/kg
R2AD1S		11/13/2002	Field Sample	33213-65-9	Endosulfan II	4.8	U	4.8	ug/kg
R2AD1S		11/13/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.8	U	4.8	ug/kg
R2AD1S		11/13/2002	Field Sample	72-20-8	Endrin	4.8	U	4.8	ug/kg
R2AD1S		11/13/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.8	U	4.8	ug/kg
R2AD1S		11/13/2002	Field Sample	53494-70-5	Endrin Ketone	4.8	U	4.8	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2AD1S		11/13/2002	Field Sample	100-41-4	Ethylbenzene	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	206-44-0	Fluoranthene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	86-73-7	Fluorene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.5	U	2.5	ug/kg
R2AD1S		11/13/2002	Field Sample	5103-74-2	gamma-Chlordane	2.5	U	2.5	ug/kg
R2AD1S		11/13/2002	Field Sample	76-44-8	Heptachlor	2.5	U	2.5	ug/kg
R2AD1S		11/13/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.5	U	2.5	ug/kg
R2AD1S		11/13/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	14	U	14	ug/kg
R2AD1S		11/13/2002	Field Sample	118-74-1	Hexachlorobenzene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	9.7	U	9.7	ug/kg
R2AD1S		11/13/2002	Field Sample	87-68-3	Hexachlorobutadiene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	67-72-1	Hexachloroethane	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	7439-89-6	Iron	12000		0.05	mg/kg
R2AD1S		11/13/2002	Field Sample	78-59-1	Isophorone	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	7439-92-1	Lead	11	J	0.005	mg/kg
R2AD1S		11/13/2002	Field Sample	7439-95-4	Magnesium	5100		47	mg/kg
R2AD1S		11/13/2002	Field Sample	7439-96-5	Manganese	310		0.01	mg/kg
R2AD1S		11/13/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2900	U	2900	ug/kg
R2AD1S		11/13/2002	Field Sample	93-65-2	MCPP	2900	U	2900	ug/kg
R2AD1S		11/13/2002	Field Sample	7439-97-6	Mercury	0.024	J	0.017	mg/kg
R2AD1S		11/13/2002	Field Sample	72-43-5	Methoxychlor	25	U	25	ug/kg
R2AD1S		11/13/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	15	U	15	ug/kg
R2AD1S		11/13/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	4.8	U	4.8	ug/kg
R2AD1S		11/13/2002	Field Sample	91-20-3	Naphthalene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	7440-02-0	Nickel	16		0.04	mg/kg
R2AD1S		11/13/2002	Field Sample	98-95-3	Nitrobenzene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	25	U	25	ug/kg
R2AD1S		11/13/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	14	U	14	ug/kg
R2AD1S		11/13/2002	Field Sample	106-47-8	P-Chloroaniline	960	R	960	ug/kg
R2AD1S		11/13/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	9.7	U	9.7	ug/kg
R2AD1S		11/13/2002	Field Sample	87-86-5	Pentachlorophenol	25	U	25	ug/kg
R2AD1S		11/13/2002	Field Sample	PH	pH	7.5		1	units
R2AD1S		11/13/2002	Field Sample	85-01-8	Phenanthrene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	108-95-2	Phenol	480	U	480	ug/kg
R2AD1S		11/13/2002	Field Sample	100-01-6	P-Nitroaniline	2500	U	2500	ug/kg
R2AD1S		11/13/2002	Field Sample	7440-09-7	Potassium	1300		94	mg/kg
R2AD1S		11/13/2002	Field Sample	129-00-0	Pyrene	480	R	480	ug/kg
R2AD1S		11/13/2002	Field Sample	7782-49-2	Selenium	1.3	U	1.3	mg/kg
R2AD1S		11/13/2002	Field Sample	7440-22-4	Silver	1.3	UJ	1.3	mg/kg
R2AD1S		11/13/2002	Field Sample	7440-23-5	Sodium	130		100	mg/kg
R2AD1S		11/13/2002	Field Sample	100-42-5	Styrene (Monomer)	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	9.7	U	9.7	ug/kg
R2AD1S		11/13/2002	Field Sample	127-18-4	Tetrachloroethene	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	7440-28-0	Thallium	1.3	U	1.3	mg/kg
R2AD1S		11/13/2002	Field Sample	108-88-3	Toluene	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	E-10195	Total Organic Carbon	19000		500	mg/kg
R2AD1S		11/13/2002	Field Sample	8001-35-2	Toxaphene	250	U	250	ug/kg
R2AD1S		11/13/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.8	U	4.8	ug/kg
R2AD1S		11/13/2002	Field Sample	79-01-6	Trichloroethylene	3	U	3	ug/kg
R2AD1S		11/13/2002	Field Sample	7440-62-2	Vanadium	20		0.01	mg/kg
R2AD1S		11/13/2002	Field Sample	75-01-4	Vinyl chloride	6	U	6	ug/kg
R2AD1S		11/13/2002	Field Sample	1330-20-7	Xylenes, Total	3	J	11	ug/kg
R2AD1S		11/13/2002	Field Sample	7440-66-6	Zinc	45		0.02	mg/kg
R2BD1S		11/13/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	75-34-3	1,1-Dichloroethane	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	75-35-4	1,1-Dichloroethylene	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	107-06-2	1,2-Dichloroethane	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	6.2	U	6.2	ug/kg
R2BD1S		11/13/2002	Field Sample	78-87-5	1,2-Dichloropropane	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	93-76-5	2,4,5-T	11	U	11	ug/kg
R2BD1S		11/13/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	11	U	11	ug/kg
R2BD1S		11/13/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	440	U	440	ug/kg
R2BD1S		11/13/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	440	U	440	ug/kg
R2BD1S		11/13/2002	Field Sample	94-75-7	2,4-D	11	UJ	11	ug/kg
R2BD1S		11/13/2002	Field Sample	94-82-6	2,4-DB	11	U	11	ug/kg
R2BD1S		11/13/2002	Field Sample	120-83-2	2,4-Dichlorophenol	440	U	440	ug/kg
R2BD1S		11/13/2002	Field Sample	105-67-9	2,4-Dimethylphenol	440	U	440	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2BD1S		11/13/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2300	U	2300	ug/kg
R2BD1S		11/13/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	78-93-3	2-Butanone (MEK)	16	U	16	ug/kg
R2BD1S		11/13/2002	Field Sample	91-58-7	2-Chloronaphthalene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	95-57-8	2-Chlorophenol	440	U	440	ug/kg
R2BD1S		11/13/2002	Field Sample	91-57-6	2-Methylnaphthalene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	440	U	440	ug/kg
R2BD1S		11/13/2002	Field Sample	88-74-4	2-Nitroaniline	2300	UJ	2300	ug/kg
R2BD1S		11/13/2002	Field Sample	88-75-5	2-Nitrophenol	440	U	440	ug/kg
R2BD1S		11/13/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	890	UJ	890	ug/kg
R2BD1S		11/13/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	440	U	440	ug/kg
R2BD1S		11/13/2002	Field Sample	99-09-2	3-Nitroaniline	2300	UJ	2300	ug/kg
R2BD1S		11/13/2002	Field Sample	72-54-8	4,4'-DDD	4.4	U	4.4	ug/kg
R2BD1S		11/13/2002	Field Sample	72-55-9	4,4'-DDE	4.4	U	4.4	ug/kg
R2BD1S		11/13/2002	Field Sample	50-29-3	4,4'-DDT	4.4	U	4.4	ug/kg
R2BD1S		11/13/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2300	U	2300	ug/kg
R2BD1S		11/13/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	440	U	440	ug/kg
R2BD1S		11/13/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	16	U	16	ug/kg
R2BD1S		11/13/2002	Field Sample	100-02-7	4-Nitrophenol	2300	U	2300	ug/kg
R2BD1S		11/13/2002	Field Sample	83-32-9	Acenaphthene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	208-96-8	Acenaphthylene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	67-64-1	Acetone	3.9	J	18	ug/kg
R2BD1S		11/13/2002	Field Sample	309-00-2	Aldrin	2.3	U	2.3	ug/kg
R2BD1S		11/13/2002	Field Sample	319-84-6	alpha-BHC	2.3	U	2.3	ug/kg
R2BD1S		11/13/2002	Field Sample	5103-71-9	alpha-Chlordane	2.3	U	2.3	ug/kg
R2BD1S		11/13/2002	Field Sample	7429-90-5	Aluminum	1300	J	0.02	mg/kg
R2BD1S		11/13/2002	Field Sample	120-12-7	Anthracene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	7440-36-0	Antimony	2.5	U	2.5	mg/kg
R2BD1S		11/13/2002	Field Sample	7440-38-2	Arsenic	2.6		0.01	mg/kg
R2BD1S		11/13/2002	Field Sample	7440-39-3	Barium	300		0.94	mg/kg
R2BD1S		11/13/2002	Field Sample	71-43-2	Benzene	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	56-55-3	Benzo(a)anthracene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	50-32-8	Benzo(a)pyrene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	7440-41-7	Beryllium	0.54	U	0.54	mg/kg
R2BD1S		11/13/2002	Field Sample	319-85-7	beta-BHC	2.3	U	2.3	ug/kg
R2BD1S		11/13/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	75-27-4	Bromodichloromethane	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	75-25-2	Bromoform	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	74-83-9	Bromomethane	6.2	U	6.2	ug/kg
R2BD1S		11/13/2002	Field Sample	7440-43-9	Cadmium	0.61	UJ	0.61	mg/kg
R2BD1S		11/13/2002	Field Sample	7440-70-2	Calcium	3000	J	1.1	mg/kg
R2BD1S		11/13/2002	Field Sample	86-74-8	Carbazole	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	75-15-0	Carbon Disulfide	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	56-23-5	Carbon Tetrachloride	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	108-90-7	Chlorobenzene	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	124-48-1	Chlorodibromomethane	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	75-00-3	Chloroethane	6.2	U	6.2	ug/kg
R2BD1S		11/13/2002	Field Sample	67-66-3	Chloroform	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	74-87-3	Chloromethane	6.2	UJ	6.2	ug/kg
R2BD1S		11/13/2002	Field Sample	7440-47-3	Chromium	7		0.01	mg/kg
R2BD1S		11/13/2002	Field Sample	218-01-9	Chrysene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	7440-48-4	Cobalt	3.3		0.01	mg/kg
R2BD1S		11/13/2002	Field Sample	7440-50-8	Copper	2.8		0.01	mg/kg
R2BD1S		11/13/2002	Field Sample	75-99-0	Dalapon	2700	R	2700	ug/kg
R2BD1S		11/13/2002	Field Sample	2051-24-3	Decachlorobiphenyl	23	U	23	ug/kg
R2BD1S		11/13/2002	Field Sample	319-86-8	delta-BHC	2.3	U	2.3	ug/kg
R2BD1S		11/13/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	132-64-9	Dibenzofuran	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	1918-00-9	Dicamba	27	U	27	ug/kg
R2BD1S		11/13/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.4	U	4.4	ug/kg
R2BD1S		11/13/2002	Field Sample	75-09-2	Dichloromethane	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	120-36-5	Dichlorprop	140	U	140	ug/kg
R2BD1S		11/13/2002	Field Sample	60-57-1	Dieldrin	4.4	U	4.4	ug/kg
R2BD1S		11/13/2002	Field Sample	84-66-2	Diethyl Phthalate	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	131-11-3	Dimethyl Phthalate	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	84-74-2	Di-n-butylphthalate	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	117-84-0	Di-n-octylphthalate	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	88-85-7	Dinoseb	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	959-98-8	Endosulfan I	2.3	U	2.3	ug/kg
R2BD1S		11/13/2002	Field Sample	33213-65-9	Endosulfan II	4.4	U	4.4	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R2BD1S		11/13/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.4	U	4.4	ug/kg
R2BD1S		11/13/2002	Field Sample	72-20-8	Endrin	4.4	U	4.4	ug/kg
R2BD1S		11/13/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.4	U	4.4	ug/kg
R2BD1S		11/13/2002	Field Sample	53494-70-5	Endrin Ketone	4.4	U	4.4	ug/kg
R2BD1S		11/13/2002	Field Sample	100-41-4	Ethylbenzene	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	206-44-0	Fluoranthene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	86-73-7	Fluorene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.3	U	2.3	ug/kg
R2BD1S		11/13/2002	Field Sample	5103-74-2	gamma-Chlordane	2.3	U	2.3	ug/kg
R2BD1S		11/13/2002	Field Sample	76-44-8	Heptachlor	2.3	U	2.3	ug/kg
R2BD1S		11/13/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.3	U	2.3	ug/kg
R2BD1S		11/13/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	14	U	14	ug/kg
R2BD1S		11/13/2002	Field Sample	118-74-1	Hexachlorobenzene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	9	U	9	ug/kg
R2BD1S		11/13/2002	Field Sample	87-68-3	Hexachlorobutadiene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	67-72-1	Hexachloroethane	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	7439-89-6	Iron	7700		0.05	mg/kg
R2BD1S		11/13/2002	Field Sample	78-59-1	Isophorone	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	7439-92-1	Lead	5.8	J	0.005	mg/kg
R2BD1S		11/13/2002	Field Sample	7439-95-4	Magnesium	1300		47	mg/kg
R2BD1S		11/13/2002	Field Sample	7439-96-5	Manganese	810		0.01	mg/kg
R2BD1S		11/13/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2700	U	2700	ug/kg
R2BD1S		11/13/2002	Field Sample	93-65-2	MCPP	2700	U	2700	ug/kg
R2BD1S		11/13/2002	Field Sample	7439-97-6	Mercury	0.0038	J	0.017	mg/kg
R2BD1S		11/13/2002	Field Sample	72-43-5	Methoxychlor	23	U	23	ug/kg
R2BD1S		11/13/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	16	U	16	ug/kg
R2BD1S		11/13/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	4.4	U	4.4	ug/kg
R2BD1S		11/13/2002	Field Sample	91-20-3	Naphthalene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	7440-02-0	Nickel	6.5		0.04	mg/kg
R2BD1S		11/13/2002	Field Sample	98-95-3	Nitrobenzene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	23	U	23	ug/kg
R2BD1S		11/13/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	14	U	14	ug/kg
R2BD1S		11/13/2002	Field Sample	106-47-8	P-Chloroaniline	890	UJ	890	ug/kg
R2BD1S		11/13/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	9	U	9	ug/kg
R2BD1S		11/13/2002	Field Sample	87-86-5	Pentachlorophenol	23	U	23	ug/kg
R2BD1S		11/13/2002	Field Sample	PH	pH	7.8		1	units
R2BD1S		11/13/2002	Field Sample	85-01-8	Phenanthrene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	108-95-2	Phenol	440	U	440	ug/kg
R2BD1S		11/13/2002	Field Sample	100-01-6	P-Nitroaniline	2300	UJ	2300	ug/kg
R2BD1S		11/13/2002	Field Sample	7440-09-7	Potassium	290		94	mg/kg
R2BD1S		11/13/2002	Field Sample	129-00-0	Pyrene	440	UJ	440	ug/kg
R2BD1S		11/13/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R2BD1S		11/13/2002	Field Sample	7440-22-4	Silver	1.2	UJ	1.2	mg/kg
R2BD1S		11/13/2002	Field Sample	7440-23-5	Sodium	52	J	100	mg/kg
R2BD1S		11/13/2002	Field Sample	100-42-5	Styrene (Monomer)	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	9	U	9	ug/kg
R2BD1S		11/13/2002	Field Sample	127-18-4	Tetrachloroethene	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	7440-28-0	Thallium	1.3		0.01	mg/kg
R2BD1S		11/13/2002	Field Sample	108-88-3	Toluene	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R2BD1S		11/13/2002	Field Sample	8001-35-2	Toxaphene	230	U	230	ug/kg
R2BD1S		11/13/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.4	U	4.4	ug/kg
R2BD1S		11/13/2002	Field Sample	79-01-6	Trichloroethylene	3.1	U	3.1	ug/kg
R2BD1S		11/13/2002	Field Sample	7440-62-2	Vanadium	15		0.01	mg/kg
R2BD1S		11/13/2002	Field Sample	75-01-4	Vinyl chloride	6.2	U	6.2	ug/kg
R2BD1S		11/13/2002	Field Sample	1330-20-7	Xylenes, Total	3.4	J	11	ug/kg
R2BD1S		11/13/2002	Field Sample	7440-66-6	Zinc	27		0.02	mg/kg
R3AU1S		11/13/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	75-34-3	1,1-Dichloroethane	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	75-35-4	1,1-Dichloroethylene	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	44	J	10	ug/kg
R3AU1S		11/13/2002	Field Sample	107-06-2	1,2-Dichloroethane	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	6.7	U	6.7	ug/kg
R3AU1S		11/13/2002	Field Sample	78-87-5	1,2-Dichloropropane	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	93-76-5	2,4,5-T	14	U	14	ug/kg
R3AU1S		11/13/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	14	U	14	ug/kg
R3AU1S		11/13/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	540	U	540	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3AU1S		11/13/2002	Field Sample	94-75-7	2,4-D	14	UJ	14	ug/kg
R3AU1S		11/13/2002	Field Sample	94-82-6	2,4-DB	14	U	14	ug/kg
R3AU1S		11/13/2002	Field Sample	120-83-2	2,4-Dichlorophenol	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	105-67-9	2,4-Dimethylphenol	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2800	U	2800	ug/kg
R3AU1S		11/13/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	78-93-3	2-Butanone (MEK)	17	U	17	ug/kg
R3AU1S		11/13/2002	Field Sample	91-58-7	2-Chloronaphthalene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	95-57-8	2-Chlorophenol	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	91-57-6	2-Methylnaphthalene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	88-74-4	2-Nitroaniline	2800	U	2800	ug/kg
R3AU1S		11/13/2002	Field Sample	88-75-5	2-Nitrophenol	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	1100	U	1100	ug/kg
R3AU1S		11/13/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	99-09-2	3-Nitroaniline	2800	U	2800	ug/kg
R3AU1S		11/13/2002	Field Sample	72-54-8	4,4'-DDD	5.4	U	5.4	ug/kg
R3AU1S		11/13/2002	Field Sample	72-55-9	4,4'-DDE	5.4	U	5.4	ug/kg
R3AU1S		11/13/2002	Field Sample	50-29-3	4,4'-DDT	3.3	J	0.1	ug/kg
R3AU1S		11/13/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2800	U	2800	ug/kg
R3AU1S		11/13/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	17	U	17	ug/kg
R3AU1S		11/13/2002	Field Sample	100-02-7	4-Nitrophenol	2800	U	2800	ug/kg
R3AU1S		11/13/2002	Field Sample	83-32-9	Acenaphthene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	208-96-8	Acenaphthylene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	67-64-1	Acetone	33	U	33	ug/kg
R3AU1S		11/13/2002	Field Sample	309-00-2	Aldrin	2.8	U	2.8	ug/kg
R3AU1S		11/13/2002	Field Sample	319-84-6	alpha-BHC	2.8	U	2.8	ug/kg
R3AU1S		11/13/2002	Field Sample	5103-71-9	alpha-Chlordane	2.8	U	2.8	ug/kg
R3AU1S		11/13/2002	Field Sample	7429-90-5	Aluminum	5800	J	0.02	mg/kg
R3AU1S		11/13/2002	Field Sample	120-12-7	Anthracene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	7440-36-0	Antimony	3.3	U	3.3	mg/kg
R3AU1S		11/13/2002	Field Sample	7440-38-2	Arsenic	3.9		0.01	mg/kg
R3AU1S		11/13/2002	Field Sample	7440-39-3	Barium	170		0.94	mg/kg
R3AU1S		11/13/2002	Field Sample	71-43-2	Benzene	49		1	ug/kg
R3AU1S		11/13/2002	Field Sample	56-55-3	Benzo(a)anthracene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	50-32-8	Benzo(a)pyrene	64	J	10	ug/kg
R3AU1S		11/13/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	60	J	10	ug/kg
R3AU1S		11/13/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	7440-41-7	Beryllium	0.5	J	0.004	mg/kg
R3AU1S		11/13/2002	Field Sample	319-85-7	beta-BHC	2.8	U	2.8	ug/kg
R3AU1S		11/13/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	55	J	10	ug/kg
R3AU1S		11/13/2002	Field Sample	75-27-4	Bromodichloromethane	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	75-25-2	Bromoform	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	74-83-9	Bromomethane	6.7	U	6.7	ug/kg
R3AU1S		11/13/2002	Field Sample	7440-43-9	Cadmium	1.1		0.005	mg/kg
R3AU1S		11/13/2002	Field Sample	7440-70-2	Calcium	10000	J	1.1	mg/kg
R3AU1S		11/13/2002	Field Sample	86-74-8	Carbazole	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	75-15-0	Carbon Disulfide	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	56-23-5	Carbon Tetrachloride	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	108-90-7	Chlorobenzene	5000		1	ug/kg
R3AU1S		11/13/2002	Field Sample	124-48-1	Chlorodibromomethane	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	75-00-3	Chloroethane	6.7	U	6.7	ug/kg
R3AU1S		11/13/2002	Field Sample	67-66-3	Chloroform	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	74-87-3	Chloromethane	6.7	UJ	6.7	ug/kg
R3AU1S		11/13/2002	Field Sample	7440-47-3	Chromium	11		0.01	mg/kg
R3AU1S		11/13/2002	Field Sample	218-01-9	Chrysene	28	J	10	ug/kg
R3AU1S		11/13/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	7440-48-4	Cobalt	5.9		0.01	mg/kg
R3AU1S		11/13/2002	Field Sample	7440-50-8	Copper	12		0.01	mg/kg
R3AU1S		11/13/2002	Field Sample	75-99-0	Dalapon	3300	R	3300	ug/kg
R3AU1S		11/13/2002	Field Sample	2051-24-3	Decachlorobiphenyl	28	U	28	ug/kg
R3AU1S		11/13/2002	Field Sample	319-86-8	delta-BHC	2.8	U	2.8	ug/kg
R3AU1S		11/13/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	132-64-9	Dibenzofuran	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	1918-00-9	Dicamba	33	U	33	ug/kg
R3AU1S		11/13/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	5.4	U	5.4	ug/kg
R3AU1S		11/13/2002	Field Sample	75-09-2	Dichloromethane	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	120-36-5	Dichlorprop	160	U	160	ug/kg
R3AU1S		11/13/2002	Field Sample	60-57-1	Dieldrin	5.4	U	5.4	ug/kg
R3AU1S		11/13/2002	Field Sample	84-66-2	Diethyl Phthalate	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	131-11-3	Dimethyl Phthalate	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	84-74-2	Di-n-butylphthalate	540	U	540	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3AU1S		11/13/2002	Field Sample	117-84-0	Di-n-octylphthalate	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	88-85-7	Dinoseb	540	UJ	540	ug/kg
R3AU1S		11/13/2002	Field Sample	959-98-8	Endosulfan I	2.8	U	2.8	ug/kg
R3AU1S		11/13/2002	Field Sample	33213-65-9	Endosulfan II	5.4	U	5.4	ug/kg
R3AU1S		11/13/2002	Field Sample	1031-07-8	Endosulfan Sulfate	5.4	U	5.4	ug/kg
R3AU1S		11/13/2002	Field Sample	72-20-8	Endrin	5.4	U	5.4	ug/kg
R3AU1S		11/13/2002	Field Sample	7421-93-4	Endrin Aldehyde	5.4	U	5.4	ug/kg
R3AU1S		11/13/2002	Field Sample	53494-70-5	Endrin Ketone	0.78	J	0.1	ug/kg
R3AU1S		11/13/2002	Field Sample	100-41-4	Ethylbenzene	2.3	J	0.83	ug/kg
R3AU1S		11/13/2002	Field Sample	206-44-0	Fluoranthene	47	J	10	ug/kg
R3AU1S		11/13/2002	Field Sample	86-73-7	Fluorene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.8	U	2.8	ug/kg
R3AU1S		11/13/2002	Field Sample	5103-74-2	gamma-Chlordane	1	J	0.05	ug/kg
R3AU1S		11/13/2002	Field Sample	76-44-8	Heptachlor	2.8	U	2.8	ug/kg
R3AU1S		11/13/2002	Field Sample	1024-57-3	Heptachlor Epoxide	0.31	J	0.05	ug/kg
R3AU1S		11/13/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	16	U	16	ug/kg
R3AU1S		11/13/2002	Field Sample	118-74-1	Hexachlorobenzene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	11	U	11	ug/kg
R3AU1S		11/13/2002	Field Sample	87-68-3	Hexachlorobutadiene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	67-72-1	Hexachloroethane	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	7439-89-6	Iron	13000		0.05	mg/kg
R3AU1S		11/13/2002	Field Sample	78-59-1	Isophorone	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	7439-92-1	Lead	47	J	0.005	mg/kg
R3AU1S		11/13/2002	Field Sample	7439-95-4	Magnesium	3500		47	mg/kg
R3AU1S		11/13/2002	Field Sample	7439-96-5	Manganese	540		0.01	mg/kg
R3AU1S		11/13/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	3300	U	3300	ug/kg
R3AU1S		11/13/2002	Field Sample	93-65-2	MCPP	3300	U	3300	ug/kg
R3AU1S		11/13/2002	Field Sample	7439-97-6	Mercury	0.03		0.017	mg/kg
R3AU1S		11/13/2002	Field Sample	72-43-5	Methoxychlor	28	UJ	28	ug/kg
R3AU1S		11/13/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	17	U	17	ug/kg
R3AU1S		11/13/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	1.2	J	0.1	ug/kg
R3AU1S		11/13/2002	Field Sample	91-20-3	Naphthalene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	7440-02-0	Nickel	13		0.04	mg/kg
R3AU1S		11/13/2002	Field Sample	98-95-3	Nitrobenzene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	28	U	28	ug/kg
R3AU1S		11/13/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	16	U	16	ug/kg
R3AU1S		11/13/2002	Field Sample	106-47-8	P-Chloroaniline	3000		1000	ug/kg
R3AU1S		11/13/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	11	U	11	ug/kg
R3AU1S		11/13/2002	Field Sample	87-86-5	Pentachlorophenol	1.4	J	1	ug/kg
R3AU1S		11/13/2002	Field Sample	PH	pH	7.1		1	units
R3AU1S		11/13/2002	Field Sample	85-01-8	Phenanthrene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	108-95-2	Phenol	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	100-01-6	P-Nitroaniline	2800	U	2800	ug/kg
R3AU1S		11/13/2002	Field Sample	7440-09-7	Potassium	830		94	mg/kg
R3AU1S		11/13/2002	Field Sample	129-00-0	Pyrene	540	U	540	ug/kg
R3AU1S		11/13/2002	Field Sample	7782-49-2	Selenium	1.5	U	1.5	mg/kg
R3AU1S		11/13/2002	Field Sample	7440-22-4	Silver	1.5	UJ	1.5	mg/kg
R3AU1S		11/13/2002	Field Sample	7440-23-5	Sodium	160		100	mg/kg
R3AU1S		11/13/2002	Field Sample	100-42-5	Styrene (Monomer)	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	11	U	11	ug/kg
R3AU1S		11/13/2002	Field Sample	127-18-4	Tetrachloroethene	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	7440-28-0	Thallium	1.5	U	1.5	mg/kg
R3AU1S		11/13/2002	Field Sample	108-88-3	Toluene	11		1	ug/kg
R3AU1S		11/13/2002	Field Sample	E-10195	Total Organic Carbon	19000		500	mg/kg
R3AU1S		11/13/2002	Field Sample	8001-35-2	Toxaphene	280	U	280	ug/kg
R3AU1S		11/13/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	1.2	J	0.1	ug/kg
R3AU1S		11/13/2002	Field Sample	79-01-6	Trichloroethylene	3.3	U	3.3	ug/kg
R3AU1S		11/13/2002	Field Sample	7440-62-2	Vanadium	16		0.01	mg/kg
R3AU1S		11/13/2002	Field Sample	75-01-4	Vinyl chloride	6.7	U	6.7	ug/kg
R3AU1S		11/13/2002	Field Sample	1330-20-7	Xylenes, Total	7.6		11	ug/kg
R3AU1S		11/13/2002	Field Sample	7440-66-6	Zinc	310		0.02	mg/kg
R3BU1S		11/13/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	4.5	U	4.5	ug/kg
R3BU1S		11/13/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	410	U	410	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3BU1S		11/13/2002	Field Sample	93-76-5	2,4,5-T	10	U	10	ug/kg
R3BU1S		11/13/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg
R3BU1S		11/13/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	94-75-7	2,4-D	10	UJ	10	ug/kg
R3BU1S		11/13/2002	Field Sample	94-82-6	2,4-DB	10	U	10	ug/kg
R3BU1S		11/13/2002	Field Sample	120-83-2	2,4-Dichlorophenol	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	105-67-9	2,4-Dimethylphenol	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2100	U	2100	ug/kg
R3BU1S		11/13/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	78-93-3	2-Butanone (MEK)	11	U	11	ug/kg
R3BU1S		11/13/2002	Field Sample	91-58-7	2-Chloronaphthalene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	95-57-8	2-Chlorophenol	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	91-57-6	2-Methylnaphthalene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	88-74-4	2-Nitroaniline	2100	U	2100	ug/kg
R3BU1S		11/13/2002	Field Sample	88-75-5	2-Nitrophenol	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	820	U	820	ug/kg
R3BU1S		11/13/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	99-09-2	3-Nitroaniline	2100	U	2100	ug/kg
R3BU1S		11/13/2002	Field Sample	72-54-8	4,4'-DDD	4.1	U	4.1	ug/kg
R3BU1S		11/13/2002	Field Sample	72-55-9	4,4'-DDE	4.1	U	4.1	ug/kg
R3BU1S		11/13/2002	Field Sample	50-29-3	4,4'-DDT	4.1	UJ	4.1	ug/kg
R3BU1S		11/13/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2100	U	2100	ug/kg
R3BU1S		11/13/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	11	U	11	ug/kg
R3BU1S		11/13/2002	Field Sample	100-02-7	4-Nitrophenol	2100	U	2100	ug/kg
R3BU1S		11/13/2002	Field Sample	83-32-9	Acenaphthene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	208-96-8	Acenaphthylene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	67-64-1	Acetone	5.1	J	18	ug/kg
R3BU1S		11/13/2002	Field Sample	309-00-2	Aldrin	2.1	U	2.1	ug/kg
R3BU1S		11/13/2002	Field Sample	319-84-6	alpha-BHC	2.1	U	2.1	ug/kg
R3BU1S		11/13/2002	Field Sample	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/kg
R3BU1S		11/13/2002	Field Sample	7429-90-5	Aluminum	1600	J	0.02	mg/kg
R3BU1S		11/13/2002	Field Sample	120-12-7	Anthracene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	7440-36-0	Antimony	2.5	U	2.5	mg/kg
R3BU1S		11/13/2002	Field Sample	7440-38-2	Arsenic	1.8		0.01	mg/kg
R3BU1S		11/13/2002	Field Sample	7440-39-3	Barium	26		0.94	mg/kg
R3BU1S		11/13/2002	Field Sample	71-43-2	Benzene	4.8		1	ug/kg
R3BU1S		11/13/2002	Field Sample	56-55-3	Benzo(a)anthracene	31	J	10	ug/kg
R3BU1S		11/13/2002	Field Sample	50-32-8	Benzo(a)pyrene	61	J	10	ug/kg
R3BU1S		11/13/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	45	J	10	ug/kg
R3BU1S		11/13/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	72	J	10	ug/kg
R3BU1S		11/13/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	7440-41-7	Beryllium	0.5	U	0.5	mg/kg
R3BU1S		11/13/2002	Field Sample	319-85-7	beta-BHC	2.1	U	2.1	ug/kg
R3BU1S		11/13/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	75-27-4	Bromodichloromethane	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	75-25-2	Bromoform	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	74-83-9	Bromomethane	4.5	U	4.5	ug/kg
R3BU1S		11/13/2002	Field Sample	7440-43-9	Cadmium	0.57	UJ	0.57	mg/kg
R3BU1S		11/13/2002	Field Sample	7440-70-2	Calcium	1800	J	1.1	mg/kg
R3BU1S		11/13/2002	Field Sample	86-74-8	Carbazole	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	75-15-0	Carbon Disulfide	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	108-90-7	Chlorobenzene	1300		1	ug/kg
R3BU1S		11/13/2002	Field Sample	124-48-1	Chlorodibromomethane	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	75-00-3	Chloroethane	4.5	U	4.5	ug/kg
R3BU1S		11/13/2002	Field Sample	67-66-3	Chloroform	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	74-87-3	Chloromethane	4.5	UJ	4.5	ug/kg
R3BU1S		11/13/2002	Field Sample	7440-47-3	Chromium	4.3		0.01	mg/kg
R3BU1S		11/13/2002	Field Sample	218-01-9	Chrysene	35	J	10	ug/kg
R3BU1S		11/13/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	7440-48-4	Cobalt	3.3		0.01	mg/kg
R3BU1S		11/13/2002	Field Sample	7440-50-8	Copper	2.3	J	0.01	mg/kg
R3BU1S		11/13/2002	Field Sample	75-99-0	Dalapon	2500	R	2500	ug/kg
R3BU1S		11/13/2002	Field Sample	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg
R3BU1S		11/13/2002	Field Sample	319-86-8	delta-BHC	2.1	U	2.1	ug/kg
R3BU1S		11/13/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	132-64-9	Dibenzofuran	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	1918-00-9	Dicamba	25	U	25	ug/kg
R3BU1S		11/13/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.1	U	4.1	ug/kg
R3BU1S		11/13/2002	Field Sample	75-09-2	Dichloromethane	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3BU1S		11/13/2002	Field Sample	60-57-1	Dieldrin	4.1	U	4.1	ug/kg
R3BU1S		11/13/2002	Field Sample	84-66-2	Diethyl Phthalate	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	131-11-3	Dimethyl Phthalate	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	84-74-2	Di-n-butylphthalate	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	117-84-0	Di-n-octylphthalate	41	J	10	ug/kg
R3BU1S		11/13/2002	Field Sample	88-85-7	Dinoseb	410	UJ	410	ug/kg
R3BU1S		11/13/2002	Field Sample	959-98-8	Endosulfan I	2.1	U	2.1	ug/kg
R3BU1S		11/13/2002	Field Sample	33213-65-9	Endosulfan II	4.1	U	4.1	ug/kg
R3BU1S		11/13/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.1	U	4.1	ug/kg
R3BU1S		11/13/2002	Field Sample	72-20-8	Endrin	4.1	U	4.1	ug/kg
R3BU1S		11/13/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.1	U	4.1	ug/kg
R3BU1S		11/13/2002	Field Sample	53494-70-5	Endrin Ketone	4.1	U	4.1	ug/kg
R3BU1S		11/13/2002	Field Sample	100-41-4	Ethylbenzene	1.3	J	0.83	ug/kg
R3BU1S		11/13/2002	Field Sample	206-44-0	Fluoranthene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	86-73-7	Fluorene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.1	U	2.1	ug/kg
R3BU1S		11/13/2002	Field Sample	5103-74-2	gamma-Chlordane	0.54	J	0.05	ug/kg
R3BU1S		11/13/2002	Field Sample	76-44-8	Heptachlor	0.43	J	0.05	ug/kg
R3BU1S		11/13/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.1	U	2.1	ug/kg
R3BU1S		11/13/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg
R3BU1S		11/13/2002	Field Sample	118-74-1	Hexachlorobenzene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.4	U	8.4	ug/kg
R3BU1S		11/13/2002	Field Sample	87-68-3	Hexachlorobutadiene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	67-72-1	Hexachloroethane	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	7439-89-6	Iron	4800		0.05	mg/kg
R3BU1S		11/13/2002	Field Sample	78-59-1	Isophorone	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	7439-92-1	Lead	7	J	0.005	mg/kg
R3BU1S		11/13/2002	Field Sample	7439-95-4	Magnesium	1000		47	mg/kg
R3BU1S		11/13/2002	Field Sample	7439-96-5	Manganese	130		0.01	mg/kg
R3BU1S		11/13/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2500	U	2500	ug/kg
R3BU1S		11/13/2002	Field Sample	93-65-2	MCPP	2500	U	2500	ug/kg
R3BU1S		11/13/2002	Field Sample	7439-97-6	Mercury	0.0048	J	0.017	mg/kg
R3BU1S		11/13/2002	Field Sample	72-43-5	Methoxychlor	21	UJ	21	ug/kg
R3BU1S		11/13/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	11	U	11	ug/kg
R3BU1S		11/13/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	4.1	U	4.1	ug/kg
R3BU1S		11/13/2002	Field Sample	91-20-3	Naphthalene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	7440-02-0	Nickel	6.9		0.04	mg/kg
R3BU1S		11/13/2002	Field Sample	98-95-3	Nitrobenzene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	21	U	21	ug/kg
R3BU1S		11/13/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg
R3BU1S		11/13/2002	Field Sample	106-47-8	P-Chloroaniline	1400		1000	ug/kg
R3BU1S		11/13/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.4	U	8.4	ug/kg
R3BU1S		11/13/2002	Field Sample	87-86-5	Pentachlorophenol	1.6	J	1	ug/kg
R3BU1S		11/13/2002	Field Sample	PH	pH	7.2		1	units
R3BU1S		11/13/2002	Field Sample	85-01-8	Phenanthrene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	108-95-2	Phenol	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	100-01-6	P-Nitroaniline	2100	U	2100	ug/kg
R3BU1S		11/13/2002	Field Sample	7440-09-7	Potassium	240		94	mg/kg
R3BU1S		11/13/2002	Field Sample	129-00-0	Pyrene	410	U	410	ug/kg
R3BU1S		11/13/2002	Field Sample	7782-49-2	Selenium	1.1	U	1.1	mg/kg
R3BU1S		11/13/2002	Field Sample	7440-22-4	Silver	1.1	UJ	1.1	mg/kg
R3BU1S		11/13/2002	Field Sample	7440-23-5	Sodium	41	J	100	mg/kg
R3BU1S		11/13/2002	Field Sample	100-42-5	Styrene (Monomer)	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.4	U	8.4	ug/kg
R3BU1S		11/13/2002	Field Sample	127-18-4	Tetrachloroethene	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	7440-28-0	Thallium	1.1	U	1.1	mg/kg
R3BU1S		11/13/2002	Field Sample	108-88-3	Toluene	1.5	J	1	ug/kg
R3BU1S		11/13/2002	Field Sample	E-10195	Total Organic Carbon	5800		500	mg/kg
R3BU1S		11/13/2002	Field Sample	8001-35-2	Toxaphene	210	U	210	ug/kg
R3BU1S		11/13/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.1	U	4.1	ug/kg
R3BU1S		11/13/2002	Field Sample	79-01-6	Trichloroethylene	2.2	U	2.2	ug/kg
R3BU1S		11/13/2002	Field Sample	7440-62-2	Vanadium	5.8		0.01	mg/kg
R3BU1S		11/13/2002	Field Sample	75-01-4	Vinyl chloride	4.5	U	4.5	ug/kg
R3BU1S		11/13/2002	Field Sample	1330-20-7	Xylenes, Total	5.9		11	ug/kg
R3BU1S		11/13/2002	Field Sample	7440-66-6	Zinc	25		0.02	mg/kg
R3AM1S		11/12/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	75-34-3	1,1-Dichloroethane	8		1	ug/kg
R3AM1S		11/12/2002	Field Sample	75-35-4	1,1-Dichloroethylene	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	46	J	10	ug/kg
R3AM1S		11/12/2002	Field Sample	107-06-2	1,2-Dichloroethane	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	1.6	J	10	ug/kg
R3AM1S		11/12/2002	Field Sample	78-87-5	1,2-Dichloropropane	3	U	3	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3AM1S		11/12/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	93-76-5	2,4,5-T	14	U	14	ug/kg
R3AM1S		11/12/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	14	U	14	ug/kg
R3AM1S		11/12/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	94-75-7	2,4-D	14	UJ	14	ug/kg
R3AM1S		11/12/2002	Field Sample	94-82-6	2,4-DB	14	U	14	ug/kg
R3AM1S		11/12/2002	Field Sample	120-83-2	2,4-Dichlorophenol	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	105-67-9	2,4-Dimethylphenol	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2800	U	2800	ug/kg
R3AM1S		11/12/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	78-93-3	2-Butanone (MEK)	15	U	15	ug/kg
R3AM1S		11/12/2002	Field Sample	91-58-7	2-Chloronaphthalene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	95-57-8	2-Chlorophenol	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	91-57-6	2-Methylnaphthalene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	88-74-4	2-Nitroaniline	2800	U	2800	ug/kg
R3AM1S		11/12/2002	Field Sample	88-75-5	2-Nitrophenol	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	1100	U	1100	ug/kg
R3AM1S		11/12/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	99-09-2	3-Nitroaniline	2800	U	2800	ug/kg
R3AM1S		11/12/2002	Field Sample	72-54-8	4,4'-DDD	5.4	UJ	5.4	ug/kg
R3AM1S		11/12/2002	Field Sample	72-55-9	4,4'-DDE	1.3	UJ	1.3	ug/kg
R3AM1S		11/12/2002	Field Sample	50-29-3	4,4'-DDT	5.4	UJ	5.4	ug/kg
R3AM1S		11/12/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2800	U	2800	ug/kg
R3AM1S		11/12/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	15	U	15	ug/kg
R3AM1S		11/12/2002	Field Sample	100-02-7	4-Nitrophenol	2800	U	2800	ug/kg
R3AM1S		11/12/2002	Field Sample	83-32-9	Acenaphthene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	208-96-8	Acenaphthylene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	67-64-1	Acetone	12	J	18	ug/kg
R3AM1S		11/12/2002	Field Sample	309-00-2	Aldrin	2.8	UJ	2.8	ug/kg
R3AM1S		11/12/2002	Field Sample	319-84-6	alpha-BHC	2.8	UJ	2.8	ug/kg
R3AM1S		11/12/2002	Field Sample	5103-71-9	alpha-Chlordane	2.8	UJ	2.8	ug/kg
R3AM1S		11/12/2002	Field Sample	7429-90-5	Aluminum	5900		0.02	mg/kg
R3AM1S		11/12/2002	Field Sample	120-12-7	Anthracene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	7440-36-0	Antimony	3.3	UJ	3.3	mg/kg
R3AM1S		11/12/2002	Field Sample	7440-38-2	Arsenic	3.7		0.01	mg/kg
R3AM1S		11/12/2002	Field Sample	7440-39-3	Barium	140		0.94	mg/kg
R3AM1S		11/12/2002	Field Sample	71-43-2	Benzene	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	56-55-3	Benzo(a)anthracene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	50-32-8	Benzo(a)pyrene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	41	J	10	ug/kg
R3AM1S		11/12/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	7440-41-7	Beryllium	0.41	J	0.004	mg/kg
R3AM1S		11/12/2002	Field Sample	319-85-7	beta-BHC	2.8	UJ	2.8	ug/kg
R3AM1S		11/12/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	46	J	10	ug/kg
R3AM1S		11/12/2002	Field Sample	75-27-4	Bromodichloromethane	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	75-25-2	Bromoform	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	74-83-9	Bromomethane	6	U	6	ug/kg
R3AM1S		11/12/2002	Field Sample	7440-43-9	Cadmium	1.4		0.005	mg/kg
R3AM1S		11/12/2002	Field Sample	7440-70-2	Calcium	12000	J	1.1	mg/kg
R3AM1S		11/12/2002	Field Sample	86-74-8	Carbazole	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	75-15-0	Carbon Disulfide	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	56-23-5	Carbon Tetrachloride	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	108-90-7	Chlorobenzene	26		1	ug/kg
R3AM1S		11/12/2002	Field Sample	124-48-1	Chlorodibromomethane	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	75-00-3	Chloroethane	6	U	6	ug/kg
R3AM1S		11/12/2002	Field Sample	67-66-3	Chloroform	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	74-87-3	Chloromethane	6	UJ	6	ug/kg
R3AM1S		11/12/2002	Field Sample	7440-47-3	Chromium	12		0.01	mg/kg
R3AM1S		11/12/2002	Field Sample	218-01-9	Chrysene	34	J	10	ug/kg
R3AM1S		11/12/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	7440-48-4	Cobalt	6		0.01	mg/kg
R3AM1S		11/12/2002	Field Sample	7440-50-8	Copper	18		0.01	mg/kg
R3AM1S		11/12/2002	Field Sample	75-99-0	Dalapon	9.9	J	120	ug/kg
R3AM1S		11/12/2002	Field Sample	2051-24-3	Decachlorobiphenyl	28	U	28	ug/kg
R3AM1S		11/12/2002	Field Sample	319-86-8	delta-BHC	2.8	UJ	2.8	ug/kg
R3AM1S		11/12/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	132-64-9	Dibenzofuran	540	U	540	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3AM1S		11/12/2002	Field Sample	1918-00-9	Dicamba	33	U	33	ug/kg
R3AM1S		11/12/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	1.7	J	0.1	ug/kg
R3AM1S		11/12/2002	Field Sample	75-09-2	Dichloromethane	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	120-36-5	Dichlorprop	6.8	J	100	ug/kg
R3AM1S		11/12/2002	Field Sample	60-57-1	Dieldrin	5.4	UJ	5.4	ug/kg
R3AM1S		11/12/2002	Field Sample	84-66-2	Diethyl Phthalate	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	131-11-3	Dimethyl Phthalate	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	84-74-2	Di-n-butylphthalate	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	117-84-0	Di-n-octylphthalate	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	88-85-7	Dinoseb	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	959-98-8	Endosulfan I	2.8	UJ	2.8	ug/kg
R3AM1S		11/12/2002	Field Sample	33213-65-9	Endosulfan II	5.4	UJ	5.4	ug/kg
R3AM1S		11/12/2002	Field Sample	1031-07-8	Endosulfan Sulfate	5.4	UJ	5.4	ug/kg
R3AM1S		11/12/2002	Field Sample	72-20-8	Endrin	5.4	UJ	5.4	ug/kg
R3AM1S		11/12/2002	Field Sample	7421-93-4	Endrin Aldehyde	2.7	J	0.1	ug/kg
R3AM1S		11/12/2002	Field Sample	53494-70-5	Endrin Ketone	5.4	UJ	5.4	ug/kg
R3AM1S		11/12/2002	Field Sample	100-41-4	Ethylbenzene	1.6	J	0.83	ug/kg
R3AM1S		11/12/2002	Field Sample	206-44-0	Fluoranthene	62	J	10	ug/kg
R3AM1S		11/12/2002	Field Sample	86-73-7	Fluorene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.8	UJ	2.8	ug/kg
R3AM1S		11/12/2002	Field Sample	5103-74-2	gamma-Chlordane	2.8	UJ	2.8	ug/kg
R3AM1S		11/12/2002	Field Sample	76-44-8	Heptachlor	0.4	J	0.05	ug/kg
R3AM1S		11/12/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.8	UJ	2.8	ug/kg
R3AM1S		11/12/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	16	U	16	ug/kg
R3AM1S		11/12/2002	Field Sample	118-74-1	Hexachlorobenzene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	11	U	11	ug/kg
R3AM1S		11/12/2002	Field Sample	87-68-3	Hexachlorobutadiene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	67-72-1	Hexachloroethane	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	7439-89-6	Iron	14000		0.05	mg/kg
R3AM1S		11/12/2002	Field Sample	78-59-1	Isophorone	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	7439-92-1	Lead	35	J	0.005	mg/kg
R3AM1S		11/12/2002	Field Sample	7439-95-4	Magnesium	3700		47	mg/kg
R3AM1S		11/12/2002	Field Sample	7439-96-5	Manganese	440		0.01	mg/kg
R3AM1S		11/12/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	3300	U	3300	ug/kg
R3AM1S		11/12/2002	Field Sample	93-65-2	MCPP	1000	J	120	ug/kg
R3AM1S		11/12/2002	Field Sample	7439-97-6	Mercury	0.037		0.017	mg/kg
R3AM1S		11/12/2002	Field Sample	72-43-5	Methoxychlor	28	UJ	28	ug/kg
R3AM1S		11/12/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	15	U	15	ug/kg
R3AM1S		11/12/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	2.9	J	0.1	ug/kg
R3AM1S		11/12/2002	Field Sample	91-20-3	Naphthalene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	7440-02-0	Nickel	13		0.04	mg/kg
R3AM1S		11/12/2002	Field Sample	98-95-3	Nitrobenzene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	28	U	28	ug/kg
R3AM1S		11/12/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	16	U	16	ug/kg
R3AM1S		11/12/2002	Field Sample	106-47-8	P-Chloroaniline	1100	U	1100	ug/kg
R3AM1S		11/12/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	11	U	11	ug/kg
R3AM1S		11/12/2002	Field Sample	87-86-5	Pentachlorophenol	2.1	J	1	ug/kg
R3AM1S		11/12/2002	Field Sample	PH	pH	7.4		1	units
R3AM1S		11/12/2002	Field Sample	85-01-8	Phenanthrene	43	J	10	ug/kg
R3AM1S		11/12/2002	Field Sample	108-95-2	Phenol	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	100-01-6	P-Nitroaniline	2800	U	2800	ug/kg
R3AM1S		11/12/2002	Field Sample	7440-09-7	Potassium	820		94	mg/kg
R3AM1S		11/12/2002	Field Sample	129-00-0	Pyrene	540	U	540	ug/kg
R3AM1S		11/12/2002	Field Sample	7782-49-2	Selenium	1.6	U	1.6	mg/kg
R3AM1S		11/12/2002	Field Sample	7440-22-4	Silver	1.6	U	1.6	mg/kg
R3AM1S		11/12/2002	Field Sample	7440-23-5	Sodium	270	J	100	mg/kg
R3AM1S		11/12/2002	Field Sample	100-42-5	Styrene (Monomer)	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	11	U	11	ug/kg
R3AM1S		11/12/2002	Field Sample	127-18-4	Tetrachloroethene	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	7440-28-0	Thallium	1.6	UJ	1.6	mg/kg
R3AM1S		11/12/2002	Field Sample	108-88-3	Toluene	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	E-10195	Total Organic Carbon	20000		500	mg/kg
R3AM1S		11/12/2002	Field Sample	8001-35-2	Toxaphene	280	UJ	280	ug/kg
R3AM1S		11/12/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	1.1	J	0.1	ug/kg
R3AM1S		11/12/2002	Field Sample	79-01-6	Trichloroethylene	3	U	3	ug/kg
R3AM1S		11/12/2002	Field Sample	7440-62-2	Vanadium	16		0.01	mg/kg
R3AM1S		11/12/2002	Field Sample	75-01-4	Vinyl chloride	6	U	6	ug/kg
R3AM1S		11/12/2002	Field Sample	1330-20-7	Xylenes, Total	9.4		11	ug/kg
R3AM1S		11/12/2002	Field Sample	7440-66-6	Zinc	310	J	0.02	mg/kg
R3BM1S		11/12/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	75-34-3	1,1-Dichloroethane	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	75-35-4	1,1-Dichloroethylene	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.055		0.0011	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3BM1S		11/12/2002	Field Sample	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.0077		0.00039	ug/kg
R3BM1S		11/12/2002	Field Sample	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.0015	U	0.0015	ug/kg
R3BM1S		11/12/2002	Field Sample	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.0014	U	0.0014	ug/kg
R3BM1S		11/12/2002	Field Sample	70648-26-9	1,2,3,4,7,8-HxCDF	0.00094	U	0.00094	ug/kg
R3BM1S		11/12/2002	Field Sample	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.002	U	0.002	ug/kg
R3BM1S		11/12/2002	Field Sample	57117-44-9	1,2,3,6,7,8-HxCDF	0.00054	UJ	0.00054	ug/kg
R3BM1S		11/12/2002	Field Sample	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.0015	U	0.0015	ug/kg
R3BM1S		11/12/2002	Field Sample	72918-21-9	1,2,3,7,8,9-HxCDF	0.00081	U	0.00081	ug/kg
R3BM1S		11/12/2002	Field Sample	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	0.0014	UJ	0.0014	ug/kg
R3BM1S		11/12/2002	Field Sample	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.0022	UJ	0.0022	ug/kg
R3BM1S		11/12/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	330	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	107-06-2	1,2-Dichloroethane	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	10	U	10	ug/kg
R3BM1S		11/12/2002	Field Sample	78-87-5	1,2-Dichloropropane	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	740	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	60851-34-5	2,3,4,6,7,8-HxCDF	0.00066	U	0.00066	ug/kg
R3BM1S		11/12/2002	Field Sample	57117-31-4	2,3,4,7,8-PeCDF	0.0014	UJ	0.0014	ug/kg
R3BM1S		11/12/2002	Field Sample	1746-01-6	2,3,7,8-TCDD	0.00094	U	0.00094	ug/kg
R3BM1S		11/12/2002	Field Sample	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	0.0011	J	0.00021	ug/kg
R3BM1S		11/12/2002	Field Sample	93-76-5	2,4,5-T	19	U	19	ug/kg
R3BM1S		11/12/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	19	U	19	ug/kg
R3BM1S		11/12/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	94-75-7	2,4-D	19	UJ	19	ug/kg
R3BM1S		11/12/2002	Field Sample	94-82-6	2,4-DB	19	U	19	ug/kg
R3BM1S		11/12/2002	Field Sample	120-83-2	2,4-Dichlorophenol	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	105-67-9	2,4-Dimethylphenol	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	51-28-5	2,4-Dinitrophenol	4000	U	4000	ug/kg
R3BM1S		11/12/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	78-93-3	2-Butanone (MEK)	25	U	25	ug/kg
R3BM1S		11/12/2002	Field Sample	91-58-7	2-Chloronaphthalene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	95-57-8	2-Chlorophenol	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	91-57-6	2-Methylnaphthalene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	88-74-4	2-Nitroaniline	4000	U	4000	ug/kg
R3BM1S		11/12/2002	Field Sample	88-75-5	2-Nitrophenol	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	1500	U	1500	ug/kg
R3BM1S		11/12/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	99-09-2	3-Nitroaniline	4000	U	4000	ug/kg
R3BM1S		11/12/2002	Field Sample	72-54-8	4,4'-DDD	1.2	J	0.1	ug/kg
R3BM1S		11/12/2002	Field Sample	72-55-9	4,4'-DDE	4.9	J	0.1	ug/kg
R3BM1S		11/12/2002	Field Sample	50-29-3	4,4'-DDT	7.7	UJ	7.7	ug/kg
R3BM1S		11/12/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	4000	U	4000	ug/kg
R3BM1S		11/12/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	25	U	25	ug/kg
R3BM1S		11/12/2002	Field Sample	100-02-7	4-Nitrophenol	4000	U	4000	ug/kg
R3BM1S		11/12/2002	Field Sample	83-32-9	Acenaphthene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	208-96-8	Acenaphthylene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	67-64-1	Acetone	7.9	J	18	ug/kg
R3BM1S		11/12/2002	Field Sample	309-00-2	Aldrin	4	U	4	ug/kg
R3BM1S		11/12/2002	Field Sample	319-84-6	alpha-BHC	4	U	4	ug/kg
R3BM1S		11/12/2002	Field Sample	5103-71-9	alpha-Chlordane	1.1	J	0.05	ug/kg
R3BM1S		11/12/2002	Field Sample	7429-90-5	Aluminum	7700		0.02	mg/kg
R3BM1S		11/12/2002	Field Sample	120-12-7	Anthracene	100	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	7440-36-0	Antimony	4.2	UJ	4.2	mg/kg
R3BM1S		11/12/2002	Field Sample	7440-38-2	Arsenic	6.1		0.01	mg/kg
R3BM1S		11/12/2002	Field Sample	7440-39-3	Barium	210		0.94	mg/kg
R3BM1S		11/12/2002	Field Sample	71-43-2	Benzene	34		1	ug/kg
R3BM1S		11/12/2002	Field Sample	56-55-3	Benzo(a)anthracene	91	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	50-32-8	Benzo(a)pyrene	72	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	75	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	79	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	83	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	7440-41-7	Beryllium	0.55	J	0.004	mg/kg
R3BM1S		11/12/2002	Field Sample	319-85-7	beta-BHC	0.67	J	0.05	ug/kg
R3BM1S		11/12/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	88	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	75-27-4	Bromodichloromethane	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	75-25-2	Bromoform	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	74-83-9	Bromomethane	10	U	10	ug/kg
R3BM1S		11/12/2002	Field Sample	7440-43-9	Cadmium	1	J	0.005	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3BM1S		11/12/2002	Field Sample	7440-70-2	Calcium	13000	J	1.1	mg/kg
R3BM1S		11/12/2002	Field Sample	86-74-8	Carbazole	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	75-15-0	Carbon Disulfide	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	56-23-5	Carbon Tetrachloride	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	108-90-7	Chlorobenzene	11000		1	ug/kg
R3BM1S		11/12/2002	Field Sample	124-48-1	Chlorodibromomethane	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	75-00-3	Chloroethane	10	U	10	ug/kg
R3BM1S		11/12/2002	Field Sample	67-66-3	Chloroform	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	74-87-3	Chloromethane	10	UJ	10	ug/kg
R3BM1S		11/12/2002	Field Sample	7440-47-3	Chromium	16		0.01	mg/kg
R3BM1S		11/12/2002	Field Sample	218-01-9	Chrysene	92	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	7440-48-4	Cobalt	7.3		0.01	mg/kg
R3BM1S		11/12/2002	Field Sample	7440-50-8	Copper	19		0.01	mg/kg
R3BM1S		11/12/2002	Field Sample	75-99-0	Dalapon	4.7	J	120	ug/kg
R3BM1S		11/12/2002	Field Sample	2051-24-3	Decachlorobiphenyl	40	U	40	ug/kg
R3BM1S		11/12/2002	Field Sample	319-86-8	delta-BHC	0.72	J	0.05	ug/kg
R3BM1S		11/12/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	132-64-9	Dibenzofuran	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	1918-00-9	Dicamba	46	U	46	ug/kg
R3BM1S		11/12/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	14		0.1	ug/kg
R3BM1S		11/12/2002	Field Sample	75-09-2	Dichloromethane	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	120-36-5	Dichlorprop	230	U	230	ug/kg
R3BM1S		11/12/2002	Field Sample	60-57-1	Dieldrin	7.7	U	7.7	ug/kg
R3BM1S		11/12/2002	Field Sample	84-66-2	Diethyl Phthalate	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	131-11-3	Dimethyl Phthalate	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	84-74-2	Di-n-butylphthalate	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	117-84-0	Di-n-octylphthalate	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	88-85-7	Dinoseb	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	959-98-8	Endosulfan I	1	J	0.05	ug/kg
R3BM1S		11/12/2002	Field Sample	33213-65-9	Endosulfan II	7.7	U	7.7	ug/kg
R3BM1S		11/12/2002	Field Sample	1031-07-8	Endosulfan Sulfate	7.7	U	7.7	ug/kg
R3BM1S		11/12/2002	Field Sample	72-20-8	Endrin	7.7	U	7.7	ug/kg
R3BM1S		11/12/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.1	J	0.1	ug/kg
R3BM1S		11/12/2002	Field Sample	53494-70-5	Endrin Ketone	1.2	J	0.1	ug/kg
R3BM1S		11/12/2002	Field Sample	100-41-4	Ethylbenzene	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	206-44-0	Fluoranthene	160	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	86-73-7	Fluorene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	4	U	4	ug/kg
R3BM1S		11/12/2002	Field Sample	5103-74-2	gamma-Chlordane	3	J	0.05	ug/kg
R3BM1S		11/12/2002	Field Sample	76-44-8	Heptachlor	0.98	J	0.05	ug/kg
R3BM1S		11/12/2002	Field Sample	1024-57-3	Heptachlor Epoxide	11		0.05	ug/kg
R3BM1S		11/12/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	23	U	23	ug/kg
R3BM1S		11/12/2002	Field Sample	118-74-1	Hexachlorobenzene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	16	U	16	ug/kg
R3BM1S		11/12/2002	Field Sample	87-68-3	Hexachlorobutadiene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	67-72-1	Hexachloroethane	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	7439-89-6	Iron	18000		0.05	mg/kg
R3BM1S		11/12/2002	Field Sample	78-59-1	Isophorone	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	7439-92-1	Lead	43	J	0.005	mg/kg
R3BM1S		11/12/2002	Field Sample	7439-95-4	Magnesium	4500		47	mg/kg
R3BM1S		11/12/2002	Field Sample	7439-96-5	Manganese	430		0.01	mg/kg
R3BM1S		11/12/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	380	J	120	ug/kg
R3BM1S		11/12/2002	Field Sample	93-65-2	MCPP	2500	J	120	ug/kg
R3BM1S		11/12/2002	Field Sample	7439-97-6	Mercury	0.067		0.017	mg/kg
R3BM1S		11/12/2002	Field Sample	72-43-5	Methoxychlor	40	UJ	40	ug/kg
R3BM1S		11/12/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	25	U	25	ug/kg
R3BM1S		11/12/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	29		0.1	ug/kg
R3BM1S		11/12/2002	Field Sample	91-20-3	Naphthalene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	7440-02-0	Nickel	17		0.04	mg/kg
R3BM1S		11/12/2002	Field Sample	98-95-3	Nitrobenzene	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	12	J	0.5	ug/kg
R3BM1S		11/12/2002	Field Sample	3268-87-9	OCDD	1.8		0.000033	ug/kg
R3BM1S		11/12/2002	Field Sample	39001-02-0	OCDF	0.036		0.0006	ug/kg
R3BM1S		11/12/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	23	U	23	ug/kg
R3BM1S		11/12/2002	Field Sample	106-47-8	P-Chloroaniline	1500	U	1500	ug/kg
R3BM1S		11/12/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	4.4	J	0.2	ug/kg
R3BM1S		11/12/2002	Field Sample	87-86-5	Pentachlorophenol	3.6	J	1	ug/kg
R3BM1S		11/12/2002	Field Sample	MOIST	Percent Moisture	30.1		0.1	percent
R3BM1S		11/12/2002	Field Sample	PH	pH	7.7		1	units
R3BM1S		11/12/2002	Field Sample	85-01-8	Phenanthrene	72	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	108-95-2	Phenol	770	U	770	ug/kg
R3BM1S		11/12/2002	Field Sample	100-01-6	P-Nitroaniline	4000	U	4000	ug/kg
R3BM1S		11/12/2002	Field Sample	7440-09-7	Potassium	1000		94	mg/kg
R3BM1S		11/12/2002	Field Sample	129-00-0	Pyrene	150	J	10	ug/kg
R3BM1S		11/12/2002	Field Sample	7782-49-2	Selenium	2.1	U	2.1	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3BM1S		11/12/2002	Field Sample	7440-22-4	Silver	2.1	U	2.1	mg/kg
R3BM1S		11/12/2002	Field Sample	7440-23-5	Sodium	290	J	100	mg/kg
R3BM1S		11/12/2002	Field Sample	100-42-5	Styrene (Monomer)	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	16	U	16	ug/kg
R3BM1S		11/12/2002	Field Sample	127-18-4	Tetrachloroethene	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	7440-28-0	Thallium	2.1	UJ	2.1	mg/kg
R3BM1S		11/12/2002	Field Sample	108-88-3	Toluene	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	37871-00-4	Total HpCDD	0.13		0.0011	ug/kg
R3BM1S		11/12/2002	Field Sample	38998-75-3	Total HpCDF	0.029		0.00042	ug/kg
R3BM1S		11/12/2002	Field Sample	34465-46-8	Total HxCDD	0.015		0.0011	ug/kg
R3BM1S		11/12/2002	Field Sample	55684-94-1	Total HxCDF	0.0046		0.00039	ug/kg
R3BM1S		11/12/2002	Field Sample	E-10195	Total Organic Carbon	19000		500	mg/kg
R3BM1S		11/12/2002	Field Sample	36088-22-9	Total PeCDD	0.0022	UJ	0.0022	ug/kg
R3BM1S		11/12/2002	Field Sample	30402-15-4	Total PeCDF	0.0047	J	0.00015	ug/kg
R3BM1S		11/12/2002	Field Sample	41903-57-5	Total TCDD	0.012		0.00013	ug/kg
R3BM1S		11/12/2002	Field Sample	55722-27-5	Total TCDF	0.018	J	0.00021	ug/kg
R3BM1S		11/12/2002	Field Sample	8001-35-2	Toxaphene	400	U	400	ug/kg
R3BM1S		11/12/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	10		0.1	ug/kg
R3BM1S		11/12/2002	Field Sample	79-01-6	Trichloroethylene	5.1	U	5.1	ug/kg
R3BM1S		11/12/2002	Field Sample	7440-62-2	Vanadium	20		0.01	mg/kg
R3BM1S		11/12/2002	Field Sample	75-01-4	Vinyl chloride	10	U	10	ug/kg
R3BM1S		11/12/2002	Field Sample	1330-20-7	Xylenes, Total	19		11	ug/kg
R3BM1S		11/12/2002	Field Sample	7440-66-6	Zinc	180	J	0.02	mg/kg
R3CM1S		11/13/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	5.7	U	5.7	ug/kg
R3CM1S		11/13/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	93-76-5	2,4,5-T	8.6	U	8.6	ug/kg
R3CM1S		11/13/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	8.6	U	8.6	ug/kg
R3CM1S		11/13/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	94-75-7	2,4-D	8.6	UJ	8.6	ug/kg
R3CM1S		11/13/2002	Field Sample	94-82-6	2,4-DB	8.6	U	8.6	ug/kg
R3CM1S		11/13/2002	Field Sample	120-83-2	2,4-Dichlorophenol	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	105-67-9	2,4-Dimethylphenol	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	51-28-5	2,4-Dinitrophenol	1800	U	1800	ug/kg
R3CM1S		11/13/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	78-93-3	2-Butanone (MEK)	14	U	14	ug/kg
R3CM1S		11/13/2002	Field Sample	91-58-7	2-Chloronaphthalene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	95-57-8	2-Chlorophenol	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	91-57-6	2-Methylnaphthalene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	88-74-4	2-Nitroaniline	1800	U	1800	ug/kg
R3CM1S		11/13/2002	Field Sample	88-75-5	2-Nitrophenol	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	690	U	690	ug/kg
R3CM1S		11/13/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	99-09-2	3-Nitroaniline	1800	U	1800	ug/kg
R3CM1S		11/13/2002	Field Sample	72-54-8	4,4'-DDD	3.4	U	3.4	ug/kg
R3CM1S		11/13/2002	Field Sample	72-55-9	4,4'-DDE	3.4	U	3.4	ug/kg
R3CM1S		11/13/2002	Field Sample	50-29-3	4,4'-DDT	3.4	U	3.4	ug/kg
R3CM1S		11/13/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	1800	U	1800	ug/kg
R3CM1S		11/13/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	14	U	14	ug/kg
R3CM1S		11/13/2002	Field Sample	100-02-7	4-Nitrophenol	1800	U	1800	ug/kg
R3CM1S		11/13/2002	Field Sample	83-32-9	Acenaphthene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	208-96-8	Acenaphthylene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	67-64-1	Acetone	29	U	29	ug/kg
R3CM1S		11/13/2002	Field Sample	309-00-2	Aldrin	1.8	U	1.8	ug/kg
R3CM1S		11/13/2002	Field Sample	319-84-6	alpha-BHC	1.8	U	1.8	ug/kg
R3CM1S		11/13/2002	Field Sample	5103-71-9	alpha-Chlordane	1.8	U	1.8	ug/kg
R3CM1S		11/13/2002	Field Sample	7429-90-5	Aluminum	650	J	0.02	mg/kg
R3CM1S		11/13/2002	Field Sample	120-12-7	Anthracene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	7440-36-0	Antimony	2.1	U	2.1	mg/kg
R3CM1S		11/13/2002	Field Sample	7440-38-2	Arsenic	1		0.01	mg/kg
R3CM1S		11/13/2002	Field Sample	7440-39-3	Barium	16		0.94	mg/kg
R3CM1S		11/13/2002	Field Sample	71-43-2	Benzene	2.9	U	2.9	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3CM1S		11/13/2002	Field Sample	56-55-3	Benzo(a)anthracene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	50-32-8	Benzo(a)pyrene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	7440-41-7	Beryllium	0.42	U	0.42	mg/kg
R3CM1S		11/13/2002	Field Sample	319-85-7	beta-BHC	1.8	U	1.8	ug/kg
R3CM1S		11/13/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	75-27-4	Bromodichloromethane	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	75-25-2	Bromoform	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	74-83-9	Bromomethane	5.7	U	5.7	ug/kg
R3CM1S		11/13/2002	Field Sample	7440-43-9	Cadmium	0.47	UJ	0.47	mg/kg
R3CM1S		11/13/2002	Field Sample	7440-70-2	Calcium	1200	J	1.1	mg/kg
R3CM1S		11/13/2002	Field Sample	86-74-8	Carbazole	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	75-15-0	Carbon Disulfide	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	108-90-7	Chlorobenzene	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	124-48-1	Chlorodibromomethane	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	75-00-3	Chloroethane	5.7	U	5.7	ug/kg
R3CM1S		11/13/2002	Field Sample	67-66-3	Chloroform	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	74-87-3	Chloromethane	5.7	UJ	5.7	ug/kg
R3CM1S		11/13/2002	Field Sample	7440-47-3	Chromium	2.3		0.01	mg/kg
R3CM1S		11/13/2002	Field Sample	218-01-9	Chrysene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	7440-48-4	Cobalt	1.9		0.01	mg/kg
R3CM1S		11/13/2002	Field Sample	7440-50-8	Copper	0.58	J	0.01	mg/kg
R3CM1S		11/13/2002	Field Sample	75-99-0	Dalapon	2100	R	2100	ug/kg
R3CM1S		11/13/2002	Field Sample	2051-24-3	Decachlorobiphenyl	18	U	18	ug/kg
R3CM1S		11/13/2002	Field Sample	319-86-8	delta-BHC	1.8	U	1.8	ug/kg
R3CM1S		11/13/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	132-64-9	Dibenzofuran	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	1918-00-9	Dicamba	21	U	21	ug/kg
R3CM1S		11/13/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	3.4	U	3.4	ug/kg
R3CM1S		11/13/2002	Field Sample	75-09-2	Dichloromethane	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	120-36-5	Dichlorprop	100	U	100	ug/kg
R3CM1S		11/13/2002	Field Sample	60-57-1	Dieldrin	3.4	U	3.4	ug/kg
R3CM1S		11/13/2002	Field Sample	84-66-2	Diethyl Phthalate	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	131-11-3	Dimethyl Phthalate	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	84-74-2	Di-n-butylphthalate	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	117-84-0	Di-n-octylphthalate	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	88-85-7	Dinoseb	340	UJ	340	ug/kg
R3CM1S		11/13/2002	Field Sample	959-98-8	Endosulfan I	1.8	U	1.8	ug/kg
R3CM1S		11/13/2002	Field Sample	33213-65-9	Endosulfan II	3.4	U	3.4	ug/kg
R3CM1S		11/13/2002	Field Sample	1031-07-8	Endosulfan Sulfate	3.4	U	3.4	ug/kg
R3CM1S		11/13/2002	Field Sample	72-20-8	Endrin	3.4	U	3.4	ug/kg
R3CM1S		11/13/2002	Field Sample	7421-93-4	Endrin Aldehyde	3.4	U	3.4	ug/kg
R3CM1S		11/13/2002	Field Sample	53494-70-5	Endrin Ketone	3.4	U	3.4	ug/kg
R3CM1S		11/13/2002	Field Sample	100-41-4	Ethylbenzene	1.8	J	0.83	ug/kg
R3CM1S		11/13/2002	Field Sample	206-44-0	Fluoranthene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	86-73-7	Fluorene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	1.8	U	1.8	ug/kg
R3CM1S		11/13/2002	Field Sample	5103-74-2	gamma-Chlordane	1.8	U	1.8	ug/kg
R3CM1S		11/13/2002	Field Sample	76-44-8	Heptachlor	1.8	U	1.8	ug/kg
R3CM1S		11/13/2002	Field Sample	1024-57-3	Heptachlor Epoxide	1.8	U	1.8	ug/kg
R3CM1S		11/13/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	10	U	10	ug/kg
R3CM1S		11/13/2002	Field Sample	118-74-1	Hexachlorobenzene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	7	U	7	ug/kg
R3CM1S		11/13/2002	Field Sample	87-68-3	Hexachlorobutadiene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	67-72-1	Hexachloroethane	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	7439-89-6	Iron	2700		0.05	mg/kg
R3CM1S		11/13/2002	Field Sample	78-59-1	Isophorone	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	7439-92-1	Lead	1.9	J	0.005	mg/kg
R3CM1S		11/13/2002	Field Sample	7439-95-4	Magnesium	710		47	mg/kg
R3CM1S		11/13/2002	Field Sample	7439-96-5	Manganese	210		0.01	mg/kg
R3CM1S		11/13/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2100	U	2100	ug/kg
R3CM1S		11/13/2002	Field Sample	93-65-2	MCPP	2100	U	2100	ug/kg
R3CM1S		11/13/2002	Field Sample	7439-97-6	Mercury	0.019	U	0.019	mg/kg
R3CM1S		11/13/2002	Field Sample	72-43-5	Methoxychlor	18	U	18	ug/kg
R3CM1S		11/13/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	14	U	14	ug/kg
R3CM1S		11/13/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	3.4	U	3.4	ug/kg
R3CM1S		11/13/2002	Field Sample	91-20-3	Naphthalene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	7440-02-0	Nickel	4.1		0.04	mg/kg
R3CM1S		11/13/2002	Field Sample	98-95-3	Nitrobenzene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	340	U	340	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3CM1S		11/13/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	18	U	18	ug/kg
R3CM1S		11/13/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	10	U	10	ug/kg
R3CM1S		11/13/2002	Field Sample	106-47-8	P-Chloroaniline	690	U	690	ug/kg
R3CM1S		11/13/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	7	U	7	ug/kg
R3CM1S		11/13/2002	Field Sample	87-86-5	Pentachlorophenol	18	U	18	ug/kg
R3CM1S		11/13/2002	Field Sample	PH	pH	7.7		1	units
R3CM1S		11/13/2002	Field Sample	85-01-8	Phenanthrene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	108-95-2	Phenol	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	100-01-6	P-Nitroaniline	1800	U	1800	ug/kg
R3CM1S		11/13/2002	Field Sample	7440-09-7	Potassium	120		94	mg/kg
R3CM1S		11/13/2002	Field Sample	129-00-0	Pyrene	340	U	340	ug/kg
R3CM1S		11/13/2002	Field Sample	7782-49-2	Selenium	0.95	U	0.95	mg/kg
R3CM1S		11/13/2002	Field Sample	7440-22-4	Silver	0.95	UJ	0.95	mg/kg
R3CM1S		11/13/2002	Field Sample	7440-23-5	Sodium	25	J	100	mg/kg
R3CM1S		11/13/2002	Field Sample	100-42-5	Styrene (Monomer)	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	7	U	7	ug/kg
R3CM1S		11/13/2002	Field Sample	127-18-4	Tetrachloroethene	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	7440-28-0	Thallium	0.95	U	0.95	mg/kg
R3CM1S		11/13/2002	Field Sample	108-88-3	Toluene	1.8	J	1	ug/kg
R3CM1S		11/13/2002	Field Sample	E-10195	Total Organic Carbon	3500		500	mg/kg
R3CM1S		11/13/2002	Field Sample	8001-35-2	Toxaphene	180	U	180	ug/kg
R3CM1S		11/13/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	3.4	U	3.4	ug/kg
R3CM1S		11/13/2002	Field Sample	79-01-6	Trichloroethylene	2.9	U	2.9	ug/kg
R3CM1S		11/13/2002	Field Sample	7440-62-2	Vanadium	3.9		0.01	mg/kg
R3CM1S		11/13/2002	Field Sample	75-01-4	Vinyl chloride	5.7	U	5.7	ug/kg
R3CM1S		11/13/2002	Field Sample	1330-20-7	Xylenes, Total	10		11	ug/kg
R3CM1S		11/13/2002	Field Sample	7440-66-6	Zinc	6.7		0.02	mg/kg
R3AD1S		11/12/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	4.8	U	4.8	ug/kg
R3AD1S		11/12/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	93-76-5	2,4,5-T	11	U	11	ug/kg
R3AD1S		11/12/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	11	U	11	ug/kg
R3AD1S		11/12/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	94-75-7	2,4-D	6.6	J	0.5	ug/kg
R3AD1S		11/12/2002	Field Sample	94-82-6	2,4-DB	11	U	11	ug/kg
R3AD1S		11/12/2002	Field Sample	120-83-2	2,4-Dichlorophenol	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	105-67-9	2,4-Dimethylphenol	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2200	U	2200	ug/kg
R3AD1S		11/12/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	78-93-3	2-Butanone (MEK)	12	U	12	ug/kg
R3AD1S		11/12/2002	Field Sample	91-58-7	2-Chloronaphthalene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	95-57-8	2-Chlorophenol	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	91-57-6	2-Methylnaphthalene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	88-74-4	2-Nitroaniline	2200	U	2200	ug/kg
R3AD1S		11/12/2002	Field Sample	88-75-5	2-Nitrophenol	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	850	U	850	ug/kg
R3AD1S		11/12/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	99-09-2	3-Nitroaniline	2200	U	2200	ug/kg
R3AD1S		11/12/2002	Field Sample	72-54-8	4,4'-DDD	4.2	U	4.2	ug/kg
R3AD1S		11/12/2002	Field Sample	72-55-9	4,4'-DDE	0.54	J	0.1	ug/kg
R3AD1S		11/12/2002	Field Sample	50-29-3	4,4'-DDT	4.2	UJ	4.2	ug/kg
R3AD1S		11/12/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2200	U	2200	ug/kg
R3AD1S		11/12/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	12	ug/kg
R3AD1S		11/12/2002	Field Sample	100-02-7	4-Nitrophenol	2200	U	2200	ug/kg
R3AD1S		11/12/2002	Field Sample	83-32-9	Acenaphthene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	208-96-8	Acenaphthylene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	67-64-1	Acetone	7.8	J	18	ug/kg
R3AD1S		11/12/2002	Field Sample	309-00-2	Aldrin	2.2	U	2.2	ug/kg
R3AD1S		11/12/2002	Field Sample	319-84-6	alpha-BHC	2.2	U	2.2	ug/kg
R3AD1S		11/12/2002	Field Sample	5103-71-9	alpha-Chlordane	2.2	U	2.2	ug/kg
R3AD1S		11/12/2002	Field Sample	7429-90-5	Aluminum	2000		0.02	mg/kg
R3AD1S		11/12/2002	Field Sample	120-12-7	Anthracene	420	U	420	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3AD1S		11/12/2002	Field Sample	7440-36-0	Antimony	2.3	UJ	2.3	mg/kg
R3AD1S		11/12/2002	Field Sample	7440-38-2	Arsenic	3		0.01	mg/kg
R3AD1S		11/12/2002	Field Sample	7440-39-3	Barium	89		0.94	mg/kg
R3AD1S		11/12/2002	Field Sample	71-43-2	Benzene	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	56-55-3	Benzo(a)anthracene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	50-32-8	Benzo(a)pyrene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	26	J	10	ug/kg
R3AD1S		11/12/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	7440-41-7	Beryllium	0.16	J	0.004	mg/kg
R3AD1S		11/12/2002	Field Sample	319-85-7	beta-BHC	0.26	J	0.05	ug/kg
R3AD1S		11/12/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	75-27-4	Bromodichloromethane	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	75-25-2	Bromoform	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	74-83-9	Bromomethane	4.8	U	4.8	ug/kg
R3AD1S		11/12/2002	Field Sample	7440-43-9	Cadmium	1.1		0.005	mg/kg
R3AD1S		11/12/2002	Field Sample	7440-70-2	Calcium	7300	J	1.1	mg/kg
R3AD1S		11/12/2002	Field Sample	86-74-8	Carbazole	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	75-15-0	Carbon Disulfide	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	108-90-7	Chlorobenzene	1.9	J	1	ug/kg
R3AD1S		11/12/2002	Field Sample	124-48-1	Chlorodibromomethane	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	75-00-3	Chloroethane	4.8	U	4.8	ug/kg
R3AD1S		11/12/2002	Field Sample	67-66-3	Chloroform	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	74-87-3	Chloromethane	4.8	UJ	4.8	ug/kg
R3AD1S		11/12/2002	Field Sample	7440-47-3	Chromium	5.3		0.01	mg/kg
R3AD1S		11/12/2002	Field Sample	218-01-9	Chrysene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	7440-48-4	Cobalt	3.5		0.01	mg/kg
R3AD1S		11/12/2002	Field Sample	7440-50-8	Copper	6.4		0.01	mg/kg
R3AD1S		11/12/2002	Field Sample	75-99-0	Dalapon	2600	U	2600	ug/kg
R3AD1S		11/12/2002	Field Sample	2051-24-3	Decachlorobiphenyl	22	U	22	ug/kg
R3AD1S		11/12/2002	Field Sample	319-86-8	delta-BHC	2.2	U	2.2	ug/kg
R3AD1S		11/12/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	132-64-9	Dibenzofuran	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	1918-00-9	Dicamba	26	U	26	ug/kg
R3AD1S		11/12/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	1	J	0.1	ug/kg
R3AD1S		11/12/2002	Field Sample	75-09-2	Dichloromethane	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	120-36-5	Dichlorprop	3.1	J	100	ug/kg
R3AD1S		11/12/2002	Field Sample	60-57-1	Dieldrin	4.2	U	4.2	ug/kg
R3AD1S		11/12/2002	Field Sample	84-66-2	Diethyl Phthalate	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	131-11-3	Dimethyl Phthalate	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	84-74-2	Di-n-butylphthalate	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	117-84-0	Di-n-octylphthalate	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	88-85-7	Dinoseb	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	959-98-8	Endosulfan I	2.2	U	2.2	ug/kg
R3AD1S		11/12/2002	Field Sample	33213-65-9	Endosulfan II	4.2	U	4.2	ug/kg
R3AD1S		11/12/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.2	U	4.2	ug/kg
R3AD1S		11/12/2002	Field Sample	72-20-8	Endrin	4.2	U	4.2	ug/kg
R3AD1S		11/12/2002	Field Sample	7421-93-4	Endrin Aldehyde	1.8	J	0.1	ug/kg
R3AD1S		11/12/2002	Field Sample	53494-70-5	Endrin Ketone	4.2	U	4.2	ug/kg
R3AD1S		11/12/2002	Field Sample	100-41-4	Ethylbenzene	1.1	J	0.83	ug/kg
R3AD1S		11/12/2002	Field Sample	206-44-0	Fluoranthene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	86-73-7	Fluorene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	0.18	J	0.05	ug/kg
R3AD1S		11/12/2002	Field Sample	5103-74-2	gamma-Chlordane	0.78	J	0.05	ug/kg
R3AD1S		11/12/2002	Field Sample	76-44-8	Heptachlor	2.2	UJ	2.2	ug/kg
R3AD1S		11/12/2002	Field Sample	1024-57-3	Heptachlor Epoxide	0.61	J	0.05	ug/kg
R3AD1S		11/12/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	13	U	13	ug/kg
R3AD1S		11/12/2002	Field Sample	118-74-1	Hexachlorobenzene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.6	U	8.6	ug/kg
R3AD1S		11/12/2002	Field Sample	87-68-3	Hexachlorobutadiene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	67-72-1	Hexachloroethane	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	7439-89-6	Iron	7600		0.05	mg/kg
R3AD1S		11/12/2002	Field Sample	78-59-1	Isophorone	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	7439-92-1	Lead	41	J	0.005	mg/kg
R3AD1S		11/12/2002	Field Sample	7439-95-4	Magnesium	2500		47	mg/kg
R3AD1S		11/12/2002	Field Sample	7439-96-5	Manganese	160		0.01	mg/kg
R3AD1S		11/12/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2600	U	2600	ug/kg
R3AD1S		11/12/2002	Field Sample	93-65-2	MCPP	2600	U	2600	ug/kg
R3AD1S		11/12/2002	Field Sample	7439-97-6	Mercury	0.0089	J	0.017	mg/kg
R3AD1S		11/12/2002	Field Sample	72-43-5	Methoxychlor	22	UJ	22	ug/kg
R3AD1S		11/12/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	12	U	12	ug/kg
R3AD1S		11/12/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	3.6	J	0.1	ug/kg
R3AD1S		11/12/2002	Field Sample	91-20-3	Naphthalene	420	U	420	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3AD1S		11/12/2002	Field Sample	7440-02-0	Nickel	8		0.04	mg/kg
R3AD1S		11/12/2002	Field Sample	98-95-3	Nitrobenzene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	22	U	22	ug/kg
R3AD1S		11/12/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	13	U	13	ug/kg
R3AD1S		11/12/2002	Field Sample	106-47-8	P-Chloroaniline	850	U	850	ug/kg
R3AD1S		11/12/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.6	U	8.6	ug/kg
R3AD1S		11/12/2002	Field Sample	87-86-5	Pentachlorophenol	2.8	J	1	ug/kg
R3AD1S		11/12/2002	Field Sample	PH	pH	7.8		1	units
R3AD1S		11/12/2002	Field Sample	85-01-8	Phenanthrene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	108-95-2	Phenol	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	100-01-6	P-Nitroaniline	2200	U	2200	ug/kg
R3AD1S		11/12/2002	Field Sample	7440-09-7	Potassium	380		94	mg/kg
R3AD1S		11/12/2002	Field Sample	129-00-0	Pyrene	420	U	420	ug/kg
R3AD1S		11/12/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R3AD1S		11/12/2002	Field Sample	7440-22-4	Silver	0.13	J	0.01	mg/kg
R3AD1S		11/12/2002	Field Sample	7440-23-5	Sodium	150	U	150	mg/kg
R3AD1S		11/12/2002	Field Sample	100-42-5	Styrene (Monomer)	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.6	U	8.6	ug/kg
R3AD1S		11/12/2002	Field Sample	127-18-4	Tetrachloroethene	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	7440-28-0	Thallium	1.2	UJ	1.2	mg/kg
R3AD1S		11/12/2002	Field Sample	108-88-3	Toluene	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	E-10195	Total Organic Carbon	4000		500	mg/kg
R3AD1S		11/12/2002	Field Sample	8001-35-2	Toxaphene	220	U	220	ug/kg
R3AD1S		11/12/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	0.96	J	0.1	ug/kg
R3AD1S		11/12/2002	Field Sample	79-01-6	Trichloroethylene	2.4	U	2.4	ug/kg
R3AD1S		11/12/2002	Field Sample	7440-62-2	Vanadium	8.5		0.01	mg/kg
R3AD1S		11/12/2002	Field Sample	75-01-4	Vinyl chloride	4.8	U	4.8	ug/kg
R3AD1S		11/12/2002	Field Sample	1330-20-7	Xylenes, Total	6.4		11	ug/kg
R3AD1S		11/12/2002	Field Sample	7440-66-6	Zinc	260	J	0.02	mg/kg
R3BD1S		11/12/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	5.3	U	5.3	ug/kg
R3BD1S		11/12/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	93-76-5	2,4,5-T	9.5	U	9.5	ug/kg
R3BD1S		11/12/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	9.5	U	9.5	ug/kg
R3BD1S		11/12/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	94-75-7	2,4-D	9.5	UJ	9.5	ug/kg
R3BD1S		11/12/2002	Field Sample	94-82-6	2,4-DB	9.5	U	9.5	ug/kg
R3BD1S		11/12/2002	Field Sample	120-83-2	2,4-Dichlorophenol	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	105-67-9	2,4-Dimethylphenol	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2000	U	2000	ug/kg
R3BD1S		11/12/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	78-93-3	2-Butanone (MEK)	13	U	13	ug/kg
R3BD1S		11/12/2002	Field Sample	91-58-7	2-Chloronaphthalene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	95-57-8	2-Chlorophenol	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	91-57-6	2-Methylnaphthalene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	88-74-4	2-Nitroaniline	2000	U	2000	ug/kg
R3BD1S		11/12/2002	Field Sample	88-75-5	2-Nitrophenol	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	760	U	760	ug/kg
R3BD1S		11/12/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	99-09-2	3-Nitroaniline	2000	U	2000	ug/kg
R3BD1S		11/12/2002	Field Sample	72-54-8	4,4'-DDD	3.8	U	3.8	ug/kg
R3BD1S		11/12/2002	Field Sample	72-55-9	4,4'-DDE	3.8	U	3.8	ug/kg
R3BD1S		11/12/2002	Field Sample	50-29-3	4,4'-DDT	3.8	U	3.8	ug/kg
R3BD1S		11/12/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2000	U	2000	ug/kg
R3BD1S		11/12/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	13	ug/kg
R3BD1S		11/12/2002	Field Sample	100-02-7	4-Nitrophenol	2000	U	2000	ug/kg
R3BD1S		11/12/2002	Field Sample	83-32-9	Acenaphthene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	208-96-8	Acenaphthylene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	67-64-1	Acetone	3.6	J	18	ug/kg
R3BD1S		11/12/2002	Field Sample	309-00-2	Aldrin	2	U	2	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3BD1S		11/12/2002	Field Sample	319-84-6	alpha-BHC	2	U	2	ug/kg
R3BD1S		11/12/2002	Field Sample	5103-71-9	alpha-Chlordane	2	U	2	ug/kg
R3BD1S		11/12/2002	Field Sample	7429-90-5	Aluminum	780		0.02	mg/kg
R3BD1S		11/12/2002	Field Sample	120-12-7	Anthracene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	7440-36-0	Antimony	2.1	UJ	2.1	mg/kg
R3BD1S		11/12/2002	Field Sample	7440-38-2	Arsenic	1.4	J	0.01	mg/kg
R3BD1S		11/12/2002	Field Sample	7440-39-3	Barium	28		0.94	mg/kg
R3BD1S		11/12/2002	Field Sample	71-43-2	Benzene	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	56-55-3	Benzo(a)anthracene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	50-32-8	Benzo(a)pyrene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	7440-41-7	Beryllium	0.053	J	0.004	mg/kg
R3BD1S		11/12/2002	Field Sample	319-85-7	beta-BHC	2	U	2	ug/kg
R3BD1S		11/12/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	75-27-4	Bromodichloromethane	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	75-25-2	Bromoform	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	74-83-9	Bromomethane	5.3	U	5.3	ug/kg
R3BD1S		11/12/2002	Field Sample	7440-43-9	Cadmium	0.31	J	0.005	mg/kg
R3BD1S		11/12/2002	Field Sample	7440-70-2	Calcium	1600	J	1.1	mg/kg
R3BD1S		11/12/2002	Field Sample	86-74-8	Carbazole	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	75-15-0	Carbon Disulfide	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	108-90-7	Chlorobenzene	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	124-48-1	Chlorodibromomethane	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	75-00-3	Chloroethane	5.3	U	5.3	ug/kg
R3BD1S		11/12/2002	Field Sample	67-66-3	Chloroform	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	74-87-3	Chloromethane	5.3	UJ	5.3	ug/kg
R3BD1S		11/12/2002	Field Sample	7440-47-3	Chromium	2.7		0.01	mg/kg
R3BD1S		11/12/2002	Field Sample	218-01-9	Chrysene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	7440-48-4	Cobalt	2.4		0.01	mg/kg
R3BD1S		11/12/2002	Field Sample	7440-50-8	Copper	2	J	0.01	mg/kg
R3BD1S		11/12/2002	Field Sample	75-99-0	Dalapon	2300	U	2300	ug/kg
R3BD1S		11/12/2002	Field Sample	2051-24-3	Decachlorobiphenyl	20	U	20	ug/kg
R3BD1S		11/12/2002	Field Sample	319-86-8	delta-BHC	2	U	2	ug/kg
R3BD1S		11/12/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	132-64-9	Dibenzofuran	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	1918-00-9	Dicamba	23	U	23	ug/kg
R3BD1S		11/12/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	3.8	U	3.8	ug/kg
R3BD1S		11/12/2002	Field Sample	75-09-2	Dichloromethane	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	120-36-5	Dichlorprop	110	U	110	ug/kg
R3BD1S		11/12/2002	Field Sample	60-57-1	Dieldrin	3.8	U	3.8	ug/kg
R3BD1S		11/12/2002	Field Sample	84-66-2	Diethyl Phthalate	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	131-11-3	Dimethyl Phthalate	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	84-74-2	Di-n-butylphthalate	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	117-84-0	Di-n-octylphthalate	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	88-85-7	Dinoseb	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	959-98-8	Endosulfan I	2	U	2	ug/kg
R3BD1S		11/12/2002	Field Sample	33213-65-9	Endosulfan II	3.8	U	3.8	ug/kg
R3BD1S		11/12/2002	Field Sample	1031-07-8	Endosulfan Sulfate	3.8	U	3.8	ug/kg
R3BD1S		11/12/2002	Field Sample	72-20-8	Endrin	3.8	U	3.8	ug/kg
R3BD1S		11/12/2002	Field Sample	7421-93-4	Endrin Aldehyde	1.7	J	0.1	ug/kg
R3BD1S		11/12/2002	Field Sample	53494-70-5	Endrin Ketone	0.41	J	0.1	ug/kg
R3BD1S		11/12/2002	Field Sample	100-41-4	Ethylbenzene	1.6	J	0.83	ug/kg
R3BD1S		11/12/2002	Field Sample	206-44-0	Fluoranthene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	86-73-7	Fluorene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2	U	2	ug/kg
R3BD1S		11/12/2002	Field Sample	5103-74-2	gamma-Chlordane	2	U	2	ug/kg
R3BD1S		11/12/2002	Field Sample	76-44-8	Heptachlor	2	U	2	ug/kg
R3BD1S		11/12/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2	U	2	ug/kg
R3BD1S		11/12/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	11	U	11	ug/kg
R3BD1S		11/12/2002	Field Sample	118-74-1	Hexachlorobenzene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	7.7	U	7.7	ug/kg
R3BD1S		11/12/2002	Field Sample	87-68-3	Hexachlorobutadiene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	67-72-1	Hexachloroethane	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	7439-89-6	Iron	3700		0.05	mg/kg
R3BD1S		11/12/2002	Field Sample	78-59-1	Isophorone	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	7439-92-1	Lead	11	J	0.005	mg/kg
R3BD1S		11/12/2002	Field Sample	7439-95-4	Magnesium	890		47	mg/kg
R3BD1S		11/12/2002	Field Sample	7439-96-5	Manganese	61		0.01	mg/kg
R3BD1S		11/12/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	U	2300	ug/kg
R3BD1S		11/12/2002	Field Sample	93-65-2	MCPP	2300	U	2300	ug/kg
R3BD1S		11/12/2002	Field Sample	7439-97-6	Mercury	0.0039	J	0.017	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R3BD1S		11/12/2002	Field Sample	72-43-5	Methoxychlor	20	UJ	20	ug/kg
R3BD1S		11/12/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	13	U	13	ug/kg
R3BD1S		11/12/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	3.8	U	3.8	ug/kg
R3BD1S		11/12/2002	Field Sample	91-20-3	Naphthalene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	7440-02-0	Nickel	5.6		0.04	mg/kg
R3BD1S		11/12/2002	Field Sample	98-95-3	Nitrobenzene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	C-NONACHLORC	Nonachlorobiphenyl	20	U	20	ug/kg
R3BD1S		11/12/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	11	U	11	ug/kg
R3BD1S		11/12/2002	Field Sample	106-47-8	P-Chloroaniline	760	U	760	ug/kg
R3BD1S		11/12/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	7.7	U	7.7	ug/kg
R3BD1S		11/12/2002	Field Sample	87-86-5	Pentachlorophenol	20	U	20	ug/kg
R3BD1S		11/12/2002	Field Sample	PH	pH	8.5		1	units
R3BD1S		11/12/2002	Field Sample	85-01-8	Phenanthrene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	108-95-2	Phenol	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	100-01-6	P-Nitroaniline	2000	U	2000	ug/kg
R3BD1S		11/12/2002	Field Sample	7440-09-7	Potassium	140		94	mg/kg
R3BD1S		11/12/2002	Field Sample	129-00-0	Pyrene	380	U	380	ug/kg
R3BD1S		11/12/2002	Field Sample	7782-49-2	Selenium	1	U	1	mg/kg
R3BD1S		11/12/2002	Field Sample	7440-22-4	Silver	1	U	1	mg/kg
R3BD1S		11/12/2002	Field Sample	7440-23-5	Sodium	92	U	92	mg/kg
R3BD1S		11/12/2002	Field Sample	100-42-5	Styrene (Monomer)	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	7.7	U	7.7	ug/kg
R3BD1S		11/12/2002	Field Sample	127-18-4	Tetrachloroethene	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	7440-28-0	Thallium	1	UJ	1	mg/kg
R3BD1S		11/12/2002	Field Sample	108-88-3	Toluene	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R3BD1S		11/12/2002	Field Sample	8001-35-2	Toxaphene	200	U	200	ug/kg
R3BD1S		11/12/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	3.8	U	3.8	ug/kg
R3BD1S		11/12/2002	Field Sample	79-01-6	Trichloroethylene	2.7	U	2.7	ug/kg
R3BD1S		11/12/2002	Field Sample	7440-62-2	Vanadium	5.4		0.01	mg/kg
R3BD1S		11/12/2002	Field Sample	75-01-4	Vinyl chloride	5.3	U	5.3	ug/kg
R3BD1S		11/12/2002	Field Sample	1330-20-7	Xylenes, Total	9.8		11	ug/kg
R3BD1S		11/12/2002	Field Sample	7440-66-6	Zinc	87	J	0.02	mg/kg
R4AU1S		11/11/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	4.1	U	4.1	ug/kg
R4AU1S		11/11/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	93-76-5	2,4,5-T	9.9	U	9.9	ug/kg
R4AU1S		11/11/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	9.9	U	9.9	ug/kg
R4AU1S		11/11/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	94-75-7	2,4-D	9.9	UJ	9.9	ug/kg
R4AU1S		11/11/2002	Field Sample	94-82-6	2,4-DB	9.9	U	9.9	ug/kg
R4AU1S		11/11/2002	Field Sample	120-83-2	2,4-Dichlorophenol	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	105-67-9	2,4-Dimethylphenol	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2000	U	2000	ug/kg
R4AU1S		11/11/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	78-93-3	2-Butanone (MEK)	10	U	10	ug/kg
R4AU1S		11/11/2002	Field Sample	91-58-7	2-Chloronaphthalene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	95-57-8	2-Chlorophenol	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	91-57-6	2-Methylnaphthalene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	88-74-4	2-Nitroaniline	2000	U	2000	ug/kg
R4AU1S		11/11/2002	Field Sample	88-75-5	2-Nitrophenol	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	780	U	780	ug/kg
R4AU1S		11/11/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	99-09-2	3-Nitroaniline	2000	U	2000	ug/kg
R4AU1S		11/11/2002	Field Sample	72-54-8	4,4'-DDD	3.9	U	3.9	ug/kg
R4AU1S		11/11/2002	Field Sample	72-55-9	4,4'-DDE	3.9	U	3.9	ug/kg
R4AU1S		11/11/2002	Field Sample	50-29-3	4,4'-DDT	3.9	U	3.9	ug/kg
R4AU1S		11/11/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2000	U	2000	ug/kg
R4AU1S		11/11/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/kg
R4AU1S		11/11/2002	Field Sample	100-02-7	4-Nitrophenol	2000	U	2000	ug/kg

Appendix II-B1
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4AU1S		11/11/2002	Field Sample	83-32-9	Acenaphthene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	208-96-8	Acenaphthylene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	67-64-1	Acetone	3.1	J	18	ug/kg
R4AU1S		11/11/2002	Field Sample	309-00-2	Aldrin	2	U	2	ug/kg
R4AU1S		11/11/2002	Field Sample	319-84-6	alpha-BHC	2	U	2	ug/kg
R4AU1S		11/11/2002	Field Sample	5103-71-9	alpha-Chlordane	2	U	2	ug/kg
R4AU1S		11/11/2002	Field Sample	7429-90-5	Aluminum	1100		0.02	mg/kg
R4AU1S		11/11/2002	Field Sample	120-12-7	Anthracene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	7440-36-0	Antimony	2.4	UJ	2.4	mg/kg
R4AU1S		11/11/2002	Field Sample	7440-38-2	Arsenic	1.8		0.01	mg/kg
R4AU1S		11/11/2002	Field Sample	7440-39-3	Barium	110		0.94	mg/kg
R4AU1S		11/11/2002	Field Sample	71-43-2	Benzene	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	56-55-3	Benzo(a)anthracene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	50-32-8	Benzo(a)pyrene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	7440-41-7	Beryllium	0.09	J	0.004	mg/kg
R4AU1S		11/11/2002	Field Sample	319-85-7	beta-BHC	2	U	2	ug/kg
R4AU1S		11/11/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	75-27-4	Bromodichloromethane	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	75-25-2	Bromoform	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	74-83-9	Bromomethane	4.1	U	4.1	ug/kg
R4AU1S		11/11/2002	Field Sample	7440-43-9	Cadmium	0.67		0.005	mg/kg
R4AU1S		11/11/2002	Field Sample	7440-70-2	Calcium	6100	J	1.1	mg/kg
R4AU1S		11/11/2002	Field Sample	86-74-8	Carbazole	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	75-15-0	Carbon Disulfide	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	108-90-7	Chlorobenzene	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	124-48-1	Chlorodibromomethane	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	75-00-3	Chloroethane	4.1	U	4.1	ug/kg
R4AU1S		11/11/2002	Field Sample	67-66-3	Chloroform	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	74-87-3	Chloromethane	4.1	UJ	4.1	ug/kg
R4AU1S		11/11/2002	Field Sample	7440-47-3	Chromium	10		0.01	mg/kg
R4AU1S		11/11/2002	Field Sample	218-01-9	Chrysene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	7440-48-4	Cobalt	2.5		0.01	mg/kg
R4AU1S		11/11/2002	Field Sample	7440-50-8	Copper	2.5		0.01	mg/kg
R4AU1S		11/11/2002	Field Sample	75-99-0	Dalapon	2400	U	2400	ug/kg
R4AU1S		11/11/2002	Field Sample	2051-24-3	Decachlorobiphenyl	20	U	20	ug/kg
R4AU1S		11/11/2002	Field Sample	319-86-8	delta-BHC	2	U	2	ug/kg
R4AU1S		11/11/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	132-64-9	Dibenzofuran	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	1918-00-9	Dicamba	24	U	24	ug/kg
R4AU1S		11/11/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	3.9	U	3.9	ug/kg
R4AU1S		11/11/2002	Field Sample	75-09-2	Dichloromethane	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/kg
R4AU1S		11/11/2002	Field Sample	60-57-1	Dieldrin	3.9	U	3.9	ug/kg
R4AU1S		11/11/2002	Field Sample	84-66-2	Diethyl Phthalate	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	131-11-3	Dimethyl Phthalate	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	84-74-2	Di-n-butylphthalate	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	117-84-0	Di-n-octylphthalate	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	88-85-7	Dinoseb	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	959-98-8	Endosulfan I	2	U	2	ug/kg
R4AU1S		11/11/2002	Field Sample	33213-65-9	Endosulfan II	3.9	U	3.9	ug/kg
R4AU1S		11/11/2002	Field Sample	1031-07-8	Endosulfan Sulfate	3.9	U	3.9	ug/kg
R4AU1S		11/11/2002	Field Sample	72-20-8	Endrin	3.9	U	3.9	ug/kg
R4AU1S		11/11/2002	Field Sample	7421-93-4	Endrin Aldehyde	1.2	J	0.1	ug/kg
R4AU1S		11/11/2002	Field Sample	53494-70-5	Endrin Ketone	3.9	U	3.9	ug/kg
R4AU1S		11/11/2002	Field Sample	100-41-4	Ethylbenzene	1.4	J	0.83	ug/kg
R4AU1S		11/11/2002	Field Sample	206-44-0	Fluoranthene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	86-73-7	Fluorene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2	U	2	ug/kg
R4AU1S		11/11/2002	Field Sample	5103-74-2	gamma-Chlordane	2	U	2	ug/kg
R4AU1S		11/11/2002	Field Sample	76-44-8	Heptachlor	0.31	J	0.05	ug/kg
R4AU1S		11/11/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2	U	2	ug/kg
R4AU1S		11/11/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg
R4AU1S		11/11/2002	Field Sample	118-74-1	Hexachlorobenzene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8	U	8	ug/kg
R4AU1S		11/11/2002	Field Sample	87-68-3	Hexachlorobutadiene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	67-72-1	Hexachloroethane	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	7439-89-6	Iron	6700		0.05	mg/kg
R4AU1S		11/11/2002	Field Sample	78-59-1	Isophorone	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	7439-92-1	Lead	47	J	0.005	mg/kg
R4AU1S		11/11/2002	Field Sample	7439-95-4	Magnesium	1200		47	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4AU1S		11/11/2002	Field Sample	7439-96-5	Manganese	76		0.01	mg/kg
R4AU1S		11/11/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2400	U	2400	ug/kg
R4AU1S		11/11/2002	Field Sample	93-65-2	MCPP	2400	U	2400	ug/kg
R4AU1S		11/11/2002	Field Sample	7439-97-6	Mercury	0.022	U	0.022	mg/kg
R4AU1S		11/11/2002	Field Sample	72-43-5	Methoxychlor	20	UJ	20	ug/kg
R4AU1S		11/11/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	10	U	10	ug/kg
R4AU1S		11/11/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	3.9	U	3.9	ug/kg
R4AU1S		11/11/2002	Field Sample	91-20-3	Naphthalene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	7440-02-0	Nickel	6.1		0.04	mg/kg
R4AU1S		11/11/2002	Field Sample	98-95-3	Nitrobenzene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	20	U	20	ug/kg
R4AU1S		11/11/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg
R4AU1S		11/11/2002	Field Sample	106-47-8	P-Chloroaniline	780	U	780	ug/kg
R4AU1S		11/11/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8	U	8	ug/kg
R4AU1S		11/11/2002	Field Sample	87-86-5	Pentachlorophenol	20	U	20	ug/kg
R4AU1S		11/11/2002	Field Sample	PH	pH	7.5		1	units
R4AU1S		11/11/2002	Field Sample	85-01-8	Phenanthrene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	108-95-2	Phenol	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	100-01-6	P-Nitroaniline	2000	U	2000	ug/kg
R4AU1S		11/11/2002	Field Sample	7440-09-7	Potassium	200		94	mg/kg
R4AU1S		11/11/2002	Field Sample	129-00-0	Pyrene	390	U	390	ug/kg
R4AU1S		11/11/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R4AU1S		11/11/2002	Field Sample	7440-22-4	Silver	1.2	U	1.2	mg/kg
R4AU1S		11/11/2002	Field Sample	7440-23-5	Sodium	130	U	130	mg/kg
R4AU1S		11/11/2002	Field Sample	100-42-5	Styrene (Monomer)	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8	U	8	ug/kg
R4AU1S		11/11/2002	Field Sample	127-18-4	Tetrachloroethene	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	7440-28-0	Thallium	1.2	UJ	1.2	mg/kg
R4AU1S		11/11/2002	Field Sample	108-88-3	Toluene	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	E-10195	Total Organic Carbon	2800		500	mg/kg
R4AU1S		11/11/2002	Field Sample	8001-35-2	Toxaphene	200	U	200	ug/kg
R4AU1S		11/11/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	3.9	U	3.9	ug/kg
R4AU1S		11/11/2002	Field Sample	79-01-6	Trichloroethylene	2.1	U	2.1	ug/kg
R4AU1S		11/11/2002	Field Sample	7440-62-2	Vanadium	7.4		0.01	mg/kg
R4AU1S		11/11/2002	Field Sample	75-01-4	Vinyl chloride	4.1	U	4.1	ug/kg
R4AU1S		11/11/2002	Field Sample	1330-20-7	Xylenes, Total	7.8		11	ug/kg
R4AU1S		11/11/2002	Field Sample	7440-66-6	Zinc	190	J	0.02	mg/kg
R4BU1S		11/11/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	5.1	U	5.1	ug/kg
R4BU1S		11/11/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	93-76-5	2,4,5-T	10	U	10	ug/kg
R4BU1S		11/11/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg
R4BU1S		11/11/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	94-75-7	2,4-D	10	UJ	10	ug/kg
R4BU1S		11/11/2002	Field Sample	94-82-6	2,4-DB	10	U	10	ug/kg
R4BU1S		11/11/2002	Field Sample	120-83-2	2,4-Dichlorophenol	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	105-67-9	2,4-Dimethylphenol	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2100	U	2100	ug/kg
R4BU1S		11/11/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	78-93-3	2-Butanone (MEK)	13	U	13	ug/kg
R4BU1S		11/11/2002	Field Sample	91-58-7	2-Chloronaphthalene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	95-57-8	2-Chlorophenol	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	91-57-6	2-Methylnaphthalene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	88-74-4	2-Nitroaniline	2100	U	2100	ug/kg
R4BU1S		11/11/2002	Field Sample	88-75-5	2-Nitrophenol	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	820	U	820	ug/kg
R4BU1S		11/11/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	99-09-2	3-Nitroaniline	2100	U	2100	ug/kg
R4BU1S		11/11/2002	Field Sample	72-54-8	4,4'-DDD	0.98	J	0.1	ug/kg
R4BU1S		11/11/2002	Field Sample	72-55-9	4,4'-DDE	0.4	J	0.1	ug/kg
R4BU1S		11/11/2002	Field Sample	50-29-3	4,4'-DDT	3	J	0.1	ug/kg
R4BU1S		11/11/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2100	U	2100	ug/kg
R4BU1S		11/11/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	410	U	410	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4BU1S		11/11/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	13	ug/kg
R4BU1S		11/11/2002	Field Sample	100-02-7	4-Nitrophenol	2100	U	2100	ug/kg
R4BU1S		11/11/2002	Field Sample	83-32-9	Acenaphthene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	208-96-8	Acenaphthylene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	67-64-1	Acetone	3.2	J	18	ug/kg
R4BU1S		11/11/2002	Field Sample	309-00-2	Aldrin	2.1	U	2.1	ug/kg
R4BU1S		11/11/2002	Field Sample	319-84-6	alpha-BHC	2.1	U	2.1	ug/kg
R4BU1S		11/11/2002	Field Sample	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/kg
R4BU1S		11/11/2002	Field Sample	7429-90-5	Aluminum	890		0.02	mg/kg
R4BU1S		11/11/2002	Field Sample	120-12-7	Anthracene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	7440-36-0	Antimony	2.1	UJ	2.1	mg/kg
R4BU1S		11/11/2002	Field Sample	7440-38-2	Arsenic	1.6	J	0.01	mg/kg
R4BU1S		11/11/2002	Field Sample	7440-39-3	Barium	20		0.94	mg/kg
R4BU1S		11/11/2002	Field Sample	71-43-2	Benzene	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	56-55-3	Benzo(a)anthracene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	50-32-8	Benzo(a)pyrene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	7440-41-7	Beryllium	0.066	J	0.004	mg/kg
R4BU1S		11/11/2002	Field Sample	319-85-7	beta-BHC	2.1	U	2.1	ug/kg
R4BU1S		11/11/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	75-27-4	Bromodichloromethane	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	75-25-2	Bromoform	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	74-83-9	Bromomethane	5.1	U	5.1	ug/kg
R4BU1S		11/11/2002	Field Sample	7440-43-9	Cadmium	0.3	J	0.005	mg/kg
R4BU1S		11/11/2002	Field Sample	7440-70-2	Calcium	2200	J	1.1	mg/kg
R4BU1S		11/11/2002	Field Sample	86-74-8	Carbazole	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	75-15-0	Carbon Disulfide	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	108-90-7	Chlorobenzene	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	124-48-1	Chlorodibromomethane	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	75-00-3	Chloroethane	5.1	U	5.1	ug/kg
R4BU1S		11/11/2002	Field Sample	67-66-3	Chloroform	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	74-87-3	Chloromethane	5.1	UJ	5.1	ug/kg
R4BU1S		11/11/2002	Field Sample	7440-47-3	Chromium	2.8		0.01	mg/kg
R4BU1S		11/11/2002	Field Sample	218-01-9	Chrysene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	7440-48-4	Cobalt	2		0.01	mg/kg
R4BU1S		11/11/2002	Field Sample	7440-50-8	Copper	1.5	J	0.01	mg/kg
R4BU1S		11/11/2002	Field Sample	75-99-0	Dalapon	2500	U	2500	ug/kg
R4BU1S		11/11/2002	Field Sample	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg
R4BU1S		11/11/2002	Field Sample	319-86-8	delta-BHC	2.1	U	2.1	ug/kg
R4BU1S		11/11/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	132-64-9	Dibenzofuran	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	1918-00-9	Dicamba	25	U	25	ug/kg
R4BU1S		11/11/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.1	U	4.1	ug/kg
R4BU1S		11/11/2002	Field Sample	75-09-2	Dichloromethane	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/kg
R4BU1S		11/11/2002	Field Sample	60-57-1	Dieldrin	1.2	J	0.1	ug/kg
R4BU1S		11/11/2002	Field Sample	84-66-2	Diethyl Phthalate	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	131-11-3	Dimethyl Phthalate	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	84-74-2	Di-n-butylphthalate	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	117-84-0	Di-n-octylphthalate	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	88-85-7	Dinoseb	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	959-98-8	Endosulfan I	2.1	U	2.1	ug/kg
R4BU1S		11/11/2002	Field Sample	33213-65-9	Endosulfan II	4.1	U	4.1	ug/kg
R4BU1S		11/11/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.1	U	4.1	ug/kg
R4BU1S		11/11/2002	Field Sample	72-20-8	Endrin	4.1	U	4.1	ug/kg
R4BU1S		11/11/2002	Field Sample	7421-93-4	Endrin Aldehyde	1.9	J	0.1	ug/kg
R4BU1S		11/11/2002	Field Sample	53494-70-5	Endrin Ketone	4.1	U	4.1	ug/kg
R4BU1S		11/11/2002	Field Sample	100-41-4	Ethylbenzene	1.5	J	0.83	ug/kg
R4BU1S		11/11/2002	Field Sample	206-44-0	Fluoranthene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	86-73-7	Fluorene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.1	U	2.1	ug/kg
R4BU1S		11/11/2002	Field Sample	5103-74-2	gamma-Chlordane	1.2	J	0.05	ug/kg
R4BU1S		11/11/2002	Field Sample	76-44-8	Heptachlor	2.1	U	2.1	ug/kg
R4BU1S		11/11/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.1	U	2.1	ug/kg
R4BU1S		11/11/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg
R4BU1S		11/11/2002	Field Sample	118-74-1	Hexachlorobenzene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.4	U	8.4	ug/kg
R4BU1S		11/11/2002	Field Sample	87-68-3	Hexachlorobutadiene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	67-72-1	Hexachloroethane	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	410	U	410	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4BU1S		11/11/2002	Field Sample	7439-89-6	Iron	3800		0.05	mg/kg
R4BU1S		11/11/2002	Field Sample	78-59-1	Isophorone	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	7439-92-1	Lead	18	J	0.005	mg/kg
R4BU1S		11/11/2002	Field Sample	7439-95-4	Magnesium	960		47	mg/kg
R4BU1S		11/11/2002	Field Sample	7439-96-5	Manganese	66		0.01	mg/kg
R4BU1S		11/11/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2500	U	2500	ug/kg
R4BU1S		11/11/2002	Field Sample	93-65-2	MCPP	2500	U	2500	ug/kg
R4BU1S		11/11/2002	Field Sample	7439-97-6	Mercury	0.023	U	0.023	mg/kg
R4BU1S		11/11/2002	Field Sample	72-43-5	Methoxychlor	21	UJ	21	ug/kg
R4BU1S		11/11/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	13	U	13	ug/kg
R4BU1S		11/11/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	4.1	U	4.1	ug/kg
R4BU1S		11/11/2002	Field Sample	91-20-3	Naphthalene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	7440-02-0	Nickel	4.8		0.04	mg/kg
R4BU1S		11/11/2002	Field Sample	98-95-3	Nitrobenzene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	C-NONACHLOR(	Nonachlorobiphenyl	21	U	21	ug/kg
R4BU1S		11/11/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg
R4BU1S		11/11/2002	Field Sample	106-47-8	P-Chloroaniline	820	U	820	ug/kg
R4BU1S		11/11/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.4	U	8.4	ug/kg
R4BU1S		11/11/2002	Field Sample	87-86-5	Pentachlorophenol	21	U	21	ug/kg
R4BU1S		11/11/2002	Field Sample	PH	pH	7.5		1	units
R4BU1S		11/11/2002	Field Sample	85-01-8	Phenanthrene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	108-95-2	Phenol	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	100-01-6	P-Nitroaniline	2100	U	2100	ug/kg
R4BU1S		11/11/2002	Field Sample	7440-09-7	Potassium	170		94	mg/kg
R4BU1S		11/11/2002	Field Sample	129-00-0	Pyrene	410	U	410	ug/kg
R4BU1S		11/11/2002	Field Sample	7782-49-2	Selenium	1	U	1	mg/kg
R4BU1S		11/11/2002	Field Sample	7440-22-4	Silver	1	U	1	mg/kg
R4BU1S		11/11/2002	Field Sample	7440-23-5	Sodium	110	U	110	mg/kg
R4BU1S		11/11/2002	Field Sample	100-42-5	Styrene (Monomer)	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.4	U	8.4	ug/kg
R4BU1S		11/11/2002	Field Sample	127-18-4	Tetrachloroethene	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	7440-28-0	Thallium	1	UJ	1	mg/kg
R4BU1S		11/11/2002	Field Sample	108-88-3	Toluene	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R4BU1S		11/11/2002	Field Sample	8001-35-2	Toxaphene	210	U	210	ug/kg
R4BU1S		11/11/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.1	U	4.1	ug/kg
R4BU1S		11/11/2002	Field Sample	79-01-6	Trichloroethylene	2.6	U	2.6	ug/kg
R4BU1S		11/11/2002	Field Sample	7440-62-2	Vanadium	4.3		0.01	mg/kg
R4BU1S		11/11/2002	Field Sample	75-01-4	Vinyl chloride	5.1	U	5.1	ug/kg
R4BU1S		11/11/2002	Field Sample	1330-20-7	Xylenes, Total	8.9		11	ug/kg
R4BU1S		11/11/2002	Field Sample	7440-66-6	Zinc	71	J	0.02	mg/kg
R4AM1S		11/10/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	5.3	U	5.3	ug/kg
R4AM1S		11/10/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	93-76-5	2,4,5-T	10	U	10	ug/kg
R4AM1S		11/10/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg
R4AM1S		11/10/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	94-75-7	2,4-D	10	UJ	10	ug/kg
R4AM1S		11/10/2002	Field Sample	94-82-6	2,4-DB	10	U	10	ug/kg
R4AM1S		11/10/2002	Field Sample	120-83-2	2,4-Dichlorophenol	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	105-67-9	2,4-Dimethylphenol	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2100	U	2100	ug/kg
R4AM1S		11/10/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	78-93-3	2-Butanone (MEK)	13	U	13	ug/kg
R4AM1S		11/10/2002	Field Sample	91-58-7	2-Chloronaphthalene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	95-57-8	2-Chlorophenol	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	91-57-6	2-Methylnaphthalene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	88-74-4	2-Nitroaniline	2100	U	2100	ug/kg
R4AM1S		11/10/2002	Field Sample	88-75-5	2-Nitrophenol	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	820	U	820	ug/kg
R4AM1S		11/10/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	99-09-2	3-Nitroaniline	2100	U	2100	ug/kg
R4AM1S		11/10/2002	Field Sample	72-54-8	4,4'-DDD	4.1	U	4.1	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4AM1S		11/10/2002	Field Sample	72-55-9	4,4'-DDE	4.1	U	4.1	ug/kg
R4AM1S		11/10/2002	Field Sample	50-29-3	4,4'-DDT	4.1	U	4.1	ug/kg
R4AM1S		11/10/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2100	U	2100	ug/kg
R4AM1S		11/10/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	13	ug/kg
R4AM1S		11/10/2002	Field Sample	100-02-7	4-Nitrophenol	2100	U	2100	ug/kg
R4AM1S		11/10/2002	Field Sample	83-32-9	Acenaphthene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	208-96-8	Acenaphthylene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	67-64-1	Acetone	27	U	27	ug/kg
R4AM1S		11/10/2002	Field Sample	309-00-2	Aldrin	2.1	U	2.1	ug/kg
R4AM1S		11/10/2002	Field Sample	319-84-6	alpha-BHC	2.1	U	2.1	ug/kg
R4AM1S		11/10/2002	Field Sample	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/kg
R4AM1S		11/10/2002	Field Sample	7429-90-5	Aluminum	900		0.02	mg/kg
R4AM1S		11/10/2002	Field Sample	120-12-7	Anthracene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	7440-36-0	Antimony	2.3	UJ	2.3	mg/kg
R4AM1S		11/10/2002	Field Sample	7440-38-2	Arsenic	2.5		0.01	mg/kg
R4AM1S		11/10/2002	Field Sample	7440-39-3	Barium	49		0.94	mg/kg
R4AM1S		11/10/2002	Field Sample	71-43-2	Benzene	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	56-55-3	Benzo(a)anthracene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	50-32-8	Benzo(a)pyrene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	7440-41-7	Beryllium	0.067	J	0.004	mg/kg
R4AM1S		11/10/2002	Field Sample	319-85-7	beta-BHC	2.1	U	2.1	ug/kg
R4AM1S		11/10/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	75-27-4	Bromodichloromethane	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	75-25-2	Bromoform	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	74-83-9	Bromomethane	5.3	U	5.3	ug/kg
R4AM1S		11/10/2002	Field Sample	7440-43-9	Cadmium	0.58		0.005	mg/kg
R4AM1S		11/10/2002	Field Sample	7440-70-2	Calcium	3300	J	1.1	mg/kg
R4AM1S		11/10/2002	Field Sample	86-74-8	Carbazole	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	75-15-0	Carbon Disulfide	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	108-90-7	Chlorobenzene	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	124-48-1	Chlorodibromomethane	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	75-00-3	Chloroethane	5.3	U	5.3	ug/kg
R4AM1S		11/10/2002	Field Sample	67-66-3	Chloroform	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	74-87-3	Chloromethane	5.3	UJ	5.3	ug/kg
R4AM1S		11/10/2002	Field Sample	7440-47-3	Chromium	5.2		0.01	mg/kg
R4AM1S		11/10/2002	Field Sample	218-01-9	Chrysene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	7440-48-4	Cobalt	2.6		0.01	mg/kg
R4AM1S		11/10/2002	Field Sample	7440-50-8	Copper	5.6		0.01	mg/kg
R4AM1S		11/10/2002	Field Sample	75-99-0	Dalapon	2500	U	2500	ug/kg
R4AM1S		11/10/2002	Field Sample	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg
R4AM1S		11/10/2002	Field Sample	319-86-8	delta-BHC	2.1	U	2.1	ug/kg
R4AM1S		11/10/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	132-64-9	Dibenzofuran	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	1918-00-9	Dicamba	25	U	25	ug/kg
R4AM1S		11/10/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.1	U	4.1	ug/kg
R4AM1S		11/10/2002	Field Sample	75-09-2	Dichloromethane	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/kg
R4AM1S		11/10/2002	Field Sample	60-57-1	Dieldrin	4.1	U	4.1	ug/kg
R4AM1S		11/10/2002	Field Sample	84-66-2	Diethyl Phthalate	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	131-11-3	Dimethyl Phthalate	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	84-74-2	Di-n-butylphthalate	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	117-84-0	Di-n-octylphthalate	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	88-85-7	Dinoseb	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	959-98-8	Endosulfan I	2.1	U	2.1	ug/kg
R4AM1S		11/10/2002	Field Sample	33213-65-9	Endosulfan II	4.1	U	4.1	ug/kg
R4AM1S		11/10/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.1	U	4.1	ug/kg
R4AM1S		11/10/2002	Field Sample	72-20-8	Endrin	4.1	U	4.1	ug/kg
R4AM1S		11/10/2002	Field Sample	7421-93-4	Endrin Aldehyde	1.3	J	0.1	ug/kg
R4AM1S		11/10/2002	Field Sample	53494-70-5	Endrin Ketone	4.1	U	4.1	ug/kg
R4AM1S		11/10/2002	Field Sample	100-41-4	Ethylbenzene	1.7	J	0.83	ug/kg
R4AM1S		11/10/2002	Field Sample	206-44-0	Fluoranthene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	86-73-7	Fluorene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.1	U	2.1	ug/kg
R4AM1S		11/10/2002	Field Sample	5103-74-2	gamma-Chlordane	2.1	U	2.1	ug/kg
R4AM1S		11/10/2002	Field Sample	76-44-8	Heptachlor	2.1	U	2.1	ug/kg
R4AM1S		11/10/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.1	U	2.1	ug/kg
R4AM1S		11/10/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg
R4AM1S		11/10/2002	Field Sample	118-74-1	Hexachlorobenzene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.4	U	8.4	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4AM1S		11/10/2002	Field Sample	87-68-3	Hexachlorobutadiene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	67-72-1	Hexachloroethane	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	7439-89-6	Iron	15000		0.05	mg/kg
R4AM1S		11/10/2002	Field Sample	78-59-1	Isophorone	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	7439-92-1	Lead	11	J	0.005	mg/kg
R4AM1S		11/10/2002	Field Sample	7439-95-4	Magnesium	1100		47	mg/kg
R4AM1S		11/10/2002	Field Sample	7439-96-5	Manganese	110		0.01	mg/kg
R4AM1S		11/10/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2500	U	2500	ug/kg
R4AM1S		11/10/2002	Field Sample	93-65-2	MCPP	2500	U	2500	ug/kg
R4AM1S		11/10/2002	Field Sample	7439-97-6	Mercury	0.023	U	0.023	mg/kg
R4AM1S		11/10/2002	Field Sample	72-43-5	Methoxychlor	21	UJ	21	ug/kg
R4AM1S		11/10/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	13	U	13	ug/kg
R4AM1S		11/10/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	4.1	U	4.1	ug/kg
R4AM1S		11/10/2002	Field Sample	91-20-3	Naphthalene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	7440-02-0	Nickel	8.2		0.04	mg/kg
R4AM1S		11/10/2002	Field Sample	98-95-3	Nitrobenzene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	C-NONACHLOR(	Nonachlorobiphenyl	21	U	21	ug/kg
R4AM1S		11/10/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg
R4AM1S		11/10/2002	Field Sample	106-47-8	P-Chloroaniline	820	U	820	ug/kg
R4AM1S		11/10/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.4	U	8.4	ug/kg
R4AM1S		11/10/2002	Field Sample	87-86-5	Pentachlorophenol	21	U	21	ug/kg
R4AM1S		11/10/2002	Field Sample	PH	pH	7.9		1	units
R4AM1S		11/10/2002	Field Sample	85-01-8	Phenanthrene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	108-95-2	Phenol	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	100-01-6	P-Nitroaniline	2100	U	2100	ug/kg
R4AM1S		11/10/2002	Field Sample	7440-09-7	Potassium	170		94	mg/kg
R4AM1S		11/10/2002	Field Sample	129-00-0	Pyrene	410	U	410	ug/kg
R4AM1S		11/10/2002	Field Sample	7782-49-2	Selenium	1.1	U	1.1	mg/kg
R4AM1S		11/10/2002	Field Sample	7440-22-4	Silver	1.1	U	1.1	mg/kg
R4AM1S		11/10/2002	Field Sample	7440-23-5	Sodium	100	U	100	mg/kg
R4AM1S		11/10/2002	Field Sample	100-42-5	Styrene (Monomer)	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.4	U	8.4	ug/kg
R4AM1S		11/10/2002	Field Sample	127-18-4	Tetrachloroethene	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	7440-28-0	Thallium	1.1	UJ	1.1	mg/kg
R4AM1S		11/10/2002	Field Sample	108-88-3	Toluene	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R4AM1S		11/10/2002	Field Sample	8001-35-2	Toxaphene	210	U	210	ug/kg
R4AM1S		11/10/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.1	U	4.1	ug/kg
R4AM1S		11/10/2002	Field Sample	79-01-6	Trichloroethylene	2.7	U	2.7	ug/kg
R4AM1S		11/10/2002	Field Sample	7440-62-2	Vanadium	5.5		0.01	mg/kg
R4AM1S		11/10/2002	Field Sample	75-01-4	Vinyl chloride	5.3	U	5.3	ug/kg
R4AM1S		11/10/2002	Field Sample	1330-20-7	Xylenes, Total	9.7		11	ug/kg
R4AM1S		11/10/2002	Field Sample	7440-66-6	Zinc	140	J	0.02	mg/kg
R4BM1S		11/11/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	75-34-3	1,1-Dichloroethane	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	75-35-4	1,1-Dichloroethylene	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.025		0.0011	ug/kg
R4BM1S		11/11/2002	Field Sample	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.0038	J	0.00039	ug/kg
R4BM1S		11/11/2002	Field Sample	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.0003	U	0.0003	ug/kg
R4BM1S		11/11/2002	Field Sample	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.00012	U	0.00012	ug/kg
R4BM1S		11/11/2002	Field Sample	70648-26-9	1,2,3,4,7,8-HxCDF	0.00032	U	0.00032	ug/kg
R4BM1S		11/11/2002	Field Sample	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.00052	U	0.00052	ug/kg
R4BM1S		11/11/2002	Field Sample	57117-44-9	1,2,3,6,7,8-HxCDF	0.00011	U	0.00011	ug/kg
R4BM1S		11/11/2002	Field Sample	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.00019	U	0.00019	ug/kg
R4BM1S		11/11/2002	Field Sample	72918-21-9	1,2,3,7,8,9-HxCDF	0.00014	U	0.00014	ug/kg
R4BM1S		11/11/2002	Field Sample	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	0.0001	U	0.0001	ug/kg
R4BM1S		11/11/2002	Field Sample	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.00021	U	0.00021	ug/kg
R4BM1S		11/11/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	107-06-2	1,2-Dichloroethane	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	3.5	U	3.5	ug/kg
R4BM1S		11/11/2002	Field Sample	78-87-5	1,2-Dichloropropane	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	60851-34-5	2,3,4,6,7,8-HxCDF	0.00013	U	0.00013	ug/kg
R4BM1S		11/11/2002	Field Sample	57117-31-4	2,3,4,7,8-PeCDF	0.0001	U	0.0001	ug/kg
R4BM1S		11/11/2002	Field Sample	1746-01-6	2,3,7,8-TCDD	8.7E-05	U	0.000087	ug/kg
R4BM1S		11/11/2002	Field Sample	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	0.00021	U	0.00021	ug/kg
R4BM1S		11/11/2002	Field Sample	93-76-5	2,4,5-T	9.9	U	9.9	ug/kg
R4BM1S		11/11/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	9.9	U	9.9	ug/kg
R4BM1S		11/11/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	390	U	390	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4BM1S		11/11/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	94-75-7	2,4-D	9.9	UJ	9.9	ug/kg
R4BM1S		11/11/2002	Field Sample	94-82-6	2,4-DB	9.9	U	9.9	ug/kg
R4BM1S		11/11/2002	Field Sample	120-83-2	2,4-Dichlorophenol	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	105-67-9	2,4-Dimethylphenol	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2000	U	2000	ug/kg
R4BM1S		11/11/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	78-93-3	2-Butanone (MEK)	8.8	U	8.8	ug/kg
R4BM1S		11/11/2002	Field Sample	91-58-7	2-Chloronaphthalene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	95-57-8	2-Chlorophenol	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	91-57-6	2-Methylnaphthalene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	88-74-4	2-Nitroaniline	2000	U	2000	ug/kg
R4BM1S		11/11/2002	Field Sample	88-75-5	2-Nitrophenol	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	780	U	780	ug/kg
R4BM1S		11/11/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	99-09-2	3-Nitroaniline	2000	U	2000	ug/kg
R4BM1S		11/11/2002	Field Sample	72-54-8	4,4'-DDD	3.9	UJ	3.9	ug/kg
R4BM1S		11/11/2002	Field Sample	72-55-9	4,4'-DDE	3.9	UJ	3.9	ug/kg
R4BM1S		11/11/2002	Field Sample	50-29-3	4,4'-DDT	3.9	UJ	3.9	ug/kg
R4BM1S		11/11/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2000	U	2000	ug/kg
R4BM1S		11/11/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	8.8	U	8.8	ug/kg
R4BM1S		11/11/2002	Field Sample	100-02-7	4-Nitrophenol	2000	U	2000	ug/kg
R4BM1S		11/11/2002	Field Sample	83-32-9	Acenaphthene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	208-96-8	Acenaphthylene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	67-64-1	Acetone	18	U	18	ug/kg
R4BM1S		11/11/2002	Field Sample	309-00-2	Aldrin	2	UJ	2	ug/kg
R4BM1S		11/11/2002	Field Sample	319-84-6	alpha-BHC	2	UJ	2	ug/kg
R4BM1S		11/11/2002	Field Sample	5103-71-9	alpha-Chlordane	2	UJ	2	ug/kg
R4BM1S		11/11/2002	Field Sample	7429-90-5	Aluminum	770		0.02	mg/kg
R4BM1S		11/11/2002	Field Sample	120-12-7	Anthracene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	7440-36-0	Antimony	2	UJ	2	mg/kg
R4BM1S		11/11/2002	Field Sample	7440-38-2	Arsenic	1.4	J	0.01	mg/kg
R4BM1S		11/11/2002	Field Sample	7440-39-3	Barium	24		0.94	mg/kg
R4BM1S		11/11/2002	Field Sample	71-43-2	Benzene	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	56-55-3	Benzo(a)anthracene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	50-32-8	Benzo(a)pyrene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	7440-41-7	Beryllium	0.063	J	0.004	mg/kg
R4BM1S		11/11/2002	Field Sample	319-85-7	beta-BHC	2	UJ	2	ug/kg
R4BM1S		11/11/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	75-27-4	Bromodichloromethane	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	75-25-2	Bromoform	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	74-83-9	Bromomethane	3.5	U	3.5	ug/kg
R4BM1S		11/11/2002	Field Sample	7440-43-9	Cadmium	0.59	U	0.59	mg/kg
R4BM1S		11/11/2002	Field Sample	7440-70-2	Calcium	2400	J	1.1	mg/kg
R4BM1S		11/11/2002	Field Sample	86-74-8	Carbazole	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	75-15-0	Carbon Disulfide	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	56-23-5	Carbon Tetrachloride	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	108-90-7	Chlorobenzene	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	124-48-1	Chlorodibromomethane	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	75-00-3	Chloroethane	3.5	U	3.5	ug/kg
R4BM1S		11/11/2002	Field Sample	67-66-3	Chloroform	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	74-87-3	Chloromethane	3.5	UJ	3.5	ug/kg
R4BM1S		11/11/2002	Field Sample	7440-47-3	Chromium	2.2		0.01	mg/kg
R4BM1S		11/11/2002	Field Sample	218-01-9	Chrysene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	7440-48-4	Cobalt	1.9		0.01	mg/kg
R4BM1S		11/11/2002	Field Sample	7440-50-8	Copper	6		0.01	mg/kg
R4BM1S		11/11/2002	Field Sample	75-99-0	Dalapon	2400	U	2400	ug/kg
R4BM1S		11/11/2002	Field Sample	2051-24-3	Decachlorobiphenyl	20	U	20	ug/kg
R4BM1S		11/11/2002	Field Sample	319-86-8	delta-BHC	2	UJ	2	ug/kg
R4BM1S		11/11/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	132-64-9	Dibenzofuran	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	1918-00-9	Dicamba	24	U	24	ug/kg
R4BM1S		11/11/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	3.9	U	3.9	ug/kg
R4BM1S		11/11/2002	Field Sample	75-09-2	Dichloromethane	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/kg
R4BM1S		11/11/2002	Field Sample	60-57-1	Dieldrin	3.9	UJ	3.9	ug/kg
R4BM1S		11/11/2002	Field Sample	84-66-2	Diethyl Phthalate	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	131-11-3	Dimethyl Phthalate	390	U	390	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4BM1S		11/11/2002	Field Sample	84-74-2	Di-n-butylphthalate	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	117-84-0	Di-n-octylphthalate	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	88-85-7	Dinoseb	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	959-98-8	Endosulfan I	2	UJ	2	ug/kg
R4BM1S		11/11/2002	Field Sample	33213-65-9	Endosulfan II	3.9	UJ	3.9	ug/kg
R4BM1S		11/11/2002	Field Sample	1031-07-8	Endosulfan Sulfate	3.9	UJ	3.9	ug/kg
R4BM1S		11/11/2002	Field Sample	72-20-8	Endrin	3.9	UJ	3.9	ug/kg
R4BM1S		11/11/2002	Field Sample	7421-93-4	Endrin Aldehyde	3.9	UJ	3.9	ug/kg
R4BM1S		11/11/2002	Field Sample	53494-70-5	Endrin Ketone	3.9	UJ	3.9	ug/kg
R4BM1S		11/11/2002	Field Sample	100-41-4	Ethylbenzene	0.93	J	0.83	ug/kg
R4BM1S		11/11/2002	Field Sample	206-44-0	Fluoranthene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	86-73-7	Fluorene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2	UJ	2	ug/kg
R4BM1S		11/11/2002	Field Sample	5103-74-2	gamma-Chlordane	2	UJ	2	ug/kg
R4BM1S		11/11/2002	Field Sample	76-44-8	Heptachlor	2	UJ	2	ug/kg
R4BM1S		11/11/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2	UJ	2	ug/kg
R4BM1S		11/11/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg
R4BM1S		11/11/2002	Field Sample	118-74-1	Hexachlorobenzene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8	U	8	ug/kg
R4BM1S		11/11/2002	Field Sample	87-68-3	Hexachlorobutadiene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	67-72-1	Hexachloroethane	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	7439-89-6	Iron	3500		0.05	mg/kg
R4BM1S		11/11/2002	Field Sample	78-59-1	Isophorone	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	7439-92-1	Lead	11	J	0.005	mg/kg
R4BM1S		11/11/2002	Field Sample	7439-95-4	Magnesium	780		47	mg/kg
R4BM1S		11/11/2002	Field Sample	7439-96-5	Manganese	65		0.01	mg/kg
R4BM1S		11/11/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2400	U	2400	ug/kg
R4BM1S		11/11/2002	Field Sample	93-65-2	MCPP	2400	U	2400	ug/kg
R4BM1S		11/11/2002	Field Sample	7439-97-6	Mercury	0.022	U	0.022	mg/kg
R4BM1S		11/11/2002	Field Sample	72-43-5	Methoxychlor	20	UJ	20	ug/kg
R4BM1S		11/11/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	8.8	U	8.8	ug/kg
R4BM1S		11/11/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	3.9	U	3.9	ug/kg
R4BM1S		11/11/2002	Field Sample	91-20-3	Naphthalene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	7440-02-0	Nickel	4.2		0.04	mg/kg
R4BM1S		11/11/2002	Field Sample	98-95-3	Nitrobenzene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	8.9	J	0.5	ug/kg
R4BM1S		11/11/2002	Field Sample	3268-87-9	OCDD	0.39	J	0.000033	ug/kg
R4BM1S		11/11/2002	Field Sample	39001-02-0	OCDF	0.028		0.0006	ug/kg
R4BM1S		11/11/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg
R4BM1S		11/11/2002	Field Sample	106-47-8	P-Chloroaniline	780	U	780	ug/kg
R4BM1S		11/11/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8	U	8	ug/kg
R4BM1S		11/11/2002	Field Sample	87-86-5	Pentachlorophenol	20	U	20	ug/kg
R4BM1S		11/11/2002	Field Sample	MOIST	Percent Moisture	16		1	%
R4BM1S		11/11/2002	Field Sample	PH	pH	7.5		1	units
R4BM1S		11/11/2002	Field Sample	85-01-8	Phenanthrene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	108-95-2	Phenol	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	100-01-6	P-Nitroaniline	2000	U	2000	ug/kg
R4BM1S		11/11/2002	Field Sample	7440-09-7	Potassium	150		94	mg/kg
R4BM1S		11/11/2002	Field Sample	129-00-0	Pyrene	390	U	390	ug/kg
R4BM1S		11/11/2002	Field Sample	7782-49-2	Selenium	0.99	U	0.99	mg/kg
R4BM1S		11/11/2002	Field Sample	7440-22-4	Silver	0.99	U	0.99	mg/kg
R4BM1S		11/11/2002	Field Sample	7440-23-5	Sodium	100	U	100	mg/kg
R4BM1S		11/11/2002	Field Sample	100-42-5	Styrene (Monomer)	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8	U	8	ug/kg
R4BM1S		11/11/2002	Field Sample	127-18-4	Tetrachloroethene	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	7440-28-0	Thallium	0.99	UJ	0.99	mg/kg
R4BM1S		11/11/2002	Field Sample	108-88-3	Toluene	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	37871-00-4	Total HpCDD	0.05		0.0011	ug/kg
R4BM1S		11/11/2002	Field Sample	38998-75-3	Total HpCDF	0.019		0.00042	ug/kg
R4BM1S		11/11/2002	Field Sample	34465-46-8	Total HxCDD	0.00074	U	0.00074	ug/kg
R4BM1S		11/11/2002	Field Sample	55684-94-1	Total HxCDF	0.0014	U	0.0014	ug/kg
R4BM1S		11/11/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R4BM1S		11/11/2002	Field Sample	36088-22-9	Total PeCDD	0.00029	U	0.00029	ug/kg
R4BM1S		11/11/2002	Field Sample	30402-15-4	Total PeCDF	0.00015	U	0.00015	ug/kg
R4BM1S		11/11/2002	Field Sample	41903-57-5	Total TCDD	0.00019	U	0.00019	ug/kg
R4BM1S		11/11/2002	Field Sample	55722-27-5	Total TCDF	0.00021	U	0.00021	ug/kg
R4BM1S		11/11/2002	Field Sample	8001-35-2	Toxaphene	200	UJ	200	ug/kg
R4BM1S		11/11/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	3.9	U	3.9	ug/kg
R4BM1S		11/11/2002	Field Sample	79-01-6	Trichloroethylene	1.8	U	1.8	ug/kg
R4BM1S		11/11/2002	Field Sample	7440-62-2	Vanadium	3.8		0.01	mg/kg
R4BM1S		11/11/2002	Field Sample	75-01-4	Vinyl chloride	3.5	U	3.5	ug/kg
R4BM1S		11/11/2002	Field Sample	1330-20-7	Xylenes, Total	5.4		11	ug/kg
R4BM1S		11/11/2002	Field Sample	7440-66-6	Zinc	60	J	0.02	mg/kg
R4CM1S		11/11/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3.2	U	3.2	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM1S		11/11/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	75-34-3	1,1-Dichloroethane	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	75-35-4	1,1-Dichloroethylene	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	107-06-2	1,2-Dichloroethane	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	6.4	U	6.4	ug/kg
R4CM1S		11/11/2002	Field Sample	78-87-5	1,2-Dichloropropane	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	93-76-5	2,4,5-T	9.6	U	9.6	ug/kg
R4CM1S		11/11/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	9.6	U	9.6	ug/kg
R4CM1S		11/11/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	94-75-7	2,4-D	9.6	UJ	9.6	ug/kg
R4CM1S		11/11/2002	Field Sample	94-82-6	2,4-DB	9.6	U	9.6	ug/kg
R4CM1S		11/11/2002	Field Sample	120-83-2	2,4-Dichlorophenol	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	105-67-9	2,4-Dimethylphenol	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2000	U	2000	ug/kg
R4CM1S		11/11/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	78-93-3	2-Butanone (MEK)	16	U	16	ug/kg
R4CM1S		11/11/2002	Field Sample	91-58-7	2-Chloronaphthalene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	95-57-8	2-Chlorophenol	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	91-57-6	2-Methylnaphthalene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	88-74-4	2-Nitroaniline	2000	U	2000	ug/kg
R4CM1S		11/11/2002	Field Sample	88-75-5	2-Nitrophenol	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	770	U	770	ug/kg
R4CM1S		11/11/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	99-09-2	3-Nitroaniline	2000	U	2000	ug/kg
R4CM1S		11/11/2002	Field Sample	72-54-8	4,4'-DDD	3.8	U	3.8	ug/kg
R4CM1S		11/11/2002	Field Sample	72-55-9	4,4'-DDE	3.8	U	3.8	ug/kg
R4CM1S		11/11/2002	Field Sample	50-29-3	4,4'-DDT	3.8	U	3.8	ug/kg
R4CM1S		11/11/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2000	U	2000	ug/kg
R4CM1S		11/11/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	16	U	16	ug/kg
R4CM1S		11/11/2002	Field Sample	100-02-7	4-Nitrophenol	2000	U	2000	ug/kg
R4CM1S		11/11/2002	Field Sample	83-32-9	Acenaphthene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	208-96-8	Acenaphthylene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	67-64-1	Acetone	3.3	J	18	ug/kg
R4CM1S		11/11/2002	Field Sample	309-00-2	Aldrin	2	U	2	ug/kg
R4CM1S		11/11/2002	Field Sample	319-84-6	alpha-BHC	2	U	2	ug/kg
R4CM1S		11/11/2002	Field Sample	5103-71-9	alpha-Chlordane	2	U	2	ug/kg
R4CM1S		11/11/2002	Field Sample	7429-90-5	Aluminum	1000		0.02	mg/kg
R4CM1S		11/11/2002	Field Sample	120-12-7	Anthracene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	7440-36-0	Antimony	2.1	UJ	2.1	mg/kg
R4CM1S		11/11/2002	Field Sample	7440-38-2	Arsenic	1.7	J	0.01	mg/kg
R4CM1S		11/11/2002	Field Sample	7440-39-3	Barium	38		0.94	mg/kg
R4CM1S		11/11/2002	Field Sample	71-43-2	Benzene	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	56-55-3	Benzo(a)anthracene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	50-32-8	Benzo(a)pyrene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	28	J	10	ug/kg
R4CM1S		11/11/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	7440-41-7	Beryllium	0.084	J	0.004	mg/kg
R4CM1S		11/11/2002	Field Sample	319-85-7	beta-BHC	2	U	2	ug/kg
R4CM1S		11/11/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	75-27-4	Bromodichloromethane	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	75-25-2	Bromoform	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	74-83-9	Bromomethane	6.4	U	6.4	ug/kg
R4CM1S		11/11/2002	Field Sample	7440-43-9	Cadmium	0.58	U	0.58	mg/kg
R4CM1S		11/11/2002	Field Sample	7440-70-2	Calcium	1900	J	1.1	mg/kg
R4CM1S		11/11/2002	Field Sample	86-74-8	Carbazole	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	75-15-0	Carbon Disulfide	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	56-23-5	Carbon Tetrachloride	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	108-90-7	Chlorobenzene	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	124-48-1	Chlorodibromomethane	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	75-00-3	Chloroethane	6.4	U	6.4	ug/kg
R4CM1S		11/11/2002	Field Sample	67-66-3	Chloroform	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	74-87-3	Chloromethane	6.4	UJ	6.4	ug/kg
R4CM1S		11/11/2002	Field Sample	7440-47-3	Chromium	2.8		0.01	mg/kg
R4CM1S		11/11/2002	Field Sample	218-01-9	Chrysene	380	U	380	ug/kg

Appendix II-B1
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM1S		11/11/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	7440-48-4	Cobalt	2.4		0.01	mg/kg
R4CM1S		11/11/2002	Field Sample	7440-50-8	Copper	2.3	U	2.3	mg/kg
R4CM1S		11/11/2002	Field Sample	75-99-0	Dalapon	2300	U	2300	ug/kg
R4CM1S		11/11/2002	Field Sample	2051-24-3	Decachlorobiphenyl	20	U	20	ug/kg
R4CM1S		11/11/2002	Field Sample	319-86-8	delta-BHC	2	U	2	ug/kg
R4CM1S		11/11/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	132-64-9	Dibenzofuran	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	1918-00-9	Dicamba	23	U	23	ug/kg
R4CM1S		11/11/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	3.8	U	3.8	ug/kg
R4CM1S		11/11/2002	Field Sample	75-09-2	Dichloromethane	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/kg
R4CM1S		11/11/2002	Field Sample	60-57-1	Dieldrin	3.8	U	3.8	ug/kg
R4CM1S		11/11/2002	Field Sample	84-66-2	Diethyl Phthalate	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	131-11-3	Dimethyl Phthalate	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	84-74-2	Di-n-butylphthalate	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	117-84-0	Di-n-octylphthalate	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	88-85-7	Dinoseb	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	959-98-8	Endosulfan I	2	U	2	ug/kg
R4CM1S		11/11/2002	Field Sample	33213-65-9	Endosulfan II	3.8	U	3.8	ug/kg
R4CM1S		11/11/2002	Field Sample	1031-07-8	Endosulfan Sulfate	3.8	U	3.8	ug/kg
R4CM1S		11/11/2002	Field Sample	72-20-8	Endrin	3.8	U	3.8	ug/kg
R4CM1S		11/11/2002	Field Sample	7421-93-4	Endrin Aldehyde	1.4	J	0.1	ug/kg
R4CM1S		11/11/2002	Field Sample	53494-70-5	Endrin Ketone	0.76	J	0.1	ug/kg
R4CM1S		11/11/2002	Field Sample	100-41-4	Ethylbenzene	1.7	J	0.83	ug/kg
R4CM1S		11/11/2002	Field Sample	206-44-0	Fluoranthene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	86-73-7	Fluorene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2	U	2	ug/kg
R4CM1S		11/11/2002	Field Sample	5103-74-2	gamma-Chlordane	2	U	2	ug/kg
R4CM1S		11/11/2002	Field Sample	76-44-8	Heptachlor	2	U	2	ug/kg
R4CM1S		11/11/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2	U	2	ug/kg
R4CM1S		11/11/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg
R4CM1S		11/11/2002	Field Sample	118-74-1	Hexachlorobenzene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	7.8	U	7.8	ug/kg
R4CM1S		11/11/2002	Field Sample	87-68-3	Hexachlorobutadiene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	67-72-1	Hexachloroethane	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	29	J	10	ug/kg
R4CM1S		11/11/2002	Field Sample	7439-89-6	Iron	4000		0.05	mg/kg
R4CM1S		11/11/2002	Field Sample	78-59-1	Isophorone	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	7439-92-1	Lead	4.1	J	0.005	mg/kg
R4CM1S		11/11/2002	Field Sample	7439-95-4	Magnesium	740		47	mg/kg
R4CM1S		11/11/2002	Field Sample	7439-96-5	Manganese	67		0.01	mg/kg
R4CM1S		11/11/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	U	2300	ug/kg
R4CM1S		11/11/2002	Field Sample	93-65-2	MCPP	2300	U	2300	ug/kg
R4CM1S		11/11/2002	Field Sample	7439-97-6	Mercury	0.019	U	0.019	mg/kg
R4CM1S		11/11/2002	Field Sample	72-43-5	Methoxychlor	0.9	J	0.5	ug/kg
R4CM1S		11/11/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	16	U	16	ug/kg
R4CM1S		11/11/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	3.8	U	3.8	ug/kg
R4CM1S		11/11/2002	Field Sample	91-20-3	Naphthalene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	7440-02-0	Nickel	5.5		0.04	mg/kg
R4CM1S		11/11/2002	Field Sample	98-95-3	Nitrobenzene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	20	U	20	ug/kg
R4CM1S		11/11/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg
R4CM1S		11/11/2002	Field Sample	106-47-8	P-Chloroaniline	770	U	770	ug/kg
R4CM1S		11/11/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	7.8	U	7.8	ug/kg
R4CM1S		11/11/2002	Field Sample	87-86-5	Pentachlorophenol	20	U	20	ug/kg
R4CM1S		11/11/2002	Field Sample	PH	pH	7.5		1	units
R4CM1S		11/11/2002	Field Sample	85-01-8	Phenanthrene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	108-95-2	Phenol	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	100-01-6	P-Nitroaniline	2000	U	2000	ug/kg
R4CM1S		11/11/2002	Field Sample	7440-09-7	Potassium	180		94	mg/kg
R4CM1S		11/11/2002	Field Sample	129-00-0	Pyrene	380	U	380	ug/kg
R4CM1S		11/11/2002	Field Sample	7782-49-2	Selenium	1.1	U	1.1	mg/kg
R4CM1S		11/11/2002	Field Sample	7440-22-4	Silver	1.1	U	1.1	mg/kg
R4CM1S		11/11/2002	Field Sample	7440-23-5	Sodium	120	U	120	mg/kg
R4CM1S		11/11/2002	Field Sample	100-42-5	Styrene (Monomer)	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	7.8	U	7.8	ug/kg
R4CM1S		11/11/2002	Field Sample	127-18-4	Tetrachloroethene	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	7440-28-0	Thallium	1.1	UJ	1.1	mg/kg
R4CM1S		11/11/2002	Field Sample	108-88-3	Toluene	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R4CM1S		11/11/2002	Field Sample	8001-35-2	Toxaphene	200	U	200	ug/kg
R4CM1S		11/11/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	3.8	U	3.8	ug/kg
R4CM1S		11/11/2002	Field Sample	79-01-6	Trichloroethylene	3.2	U	3.2	ug/kg
R4CM1S		11/11/2002	Field Sample	7440-62-2	Vanadium	5.5		0.01	mg/kg
R4CM1S		11/11/2002	Field Sample	75-01-4	Vinyl chloride	6.4	U	6.4	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM1S		11/11/2002	Field Sample	1330-20-7	Xylenes, Total	9.6		11	ug/kg
R4CM1S		11/11/2002	Field Sample	7440-66-6	Zinc	23	J	0.02	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	71-55-6	1,1,1-Trichloroethane	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	79-34-5	1,1,2,2-Tetrachloroethane	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	79-00-5	1,1,2-Trichloroethane	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	75-34-3	1,1-Dichloroethane	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	75-35-4	1,1-Dichloroethylene	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	120-82-1	1,2,4-Trichlorobenzene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	95-50-1	1,2-Dichlorobenzene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	107-06-2	1,2-Dichloroethane	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	540-59-0	1,2-Dichloroethene (total)	5.9	U	5.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	78-87-5	1,2-Dichloropropane	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	541-73-1	1,3-Dichlorobenzene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	106-46-7	1,4-Dichlorobenzene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	93-76-5	2,4,5-T	10	U	10	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	95-95-4	2,4,5-Trichlorophenol	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	88-06-2	2,4,6-Trichlorophenol	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	94-75-7	2,4-D	10	UJ	10	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	94-82-6	2,4-DB	10	U	10	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	120-83-2	2,4-Dichlorophenol	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	105-67-9	2,4-Dimethylphenol	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	51-28-5	2,4-Dinitrophenol	2100	U	2100	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	121-14-2	2,4-Dinitrotoluene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	606-20-2	2,6-Dinitrotoluene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	78-93-3	2-Butanone (MEK)	15	U	15	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	91-58-7	2-Chloronaphthalene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	95-57-8	2-Chlorophenol	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	91-57-6	2-Methylnaphthalene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	95-48-7	2-Methylphenol (o-Cresol)	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	88-74-4	2-Nitroaniline	2100	U	2100	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	88-75-5	2-Nitrophenol	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	91-94-1	3,3'-Dichlorobenzidine	800	U	800	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	99-09-2	3-Nitroaniline	2100	U	2100	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	72-54-8	4,4'-DDD	4	U	4	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	72-55-9	4,4'-DDE	4	U	4	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	50-29-3	4,4'-DDT	4	U	4	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	534-52-1	4,6-Dinitro-2-methylphenol	2100	U	2100	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	101-55-3	4-Bromophenyl Phenyl Ether	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	59-50-7	4-Chloro-3-methylphenol	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7005-72-3	4-Chlorophenyl Phenyl Ether	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	108-10-1	4-Methyl-2-pentanone (MIBK)	15	U	15	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	100-02-7	4-Nitrophenol	2100	U	2100	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	83-32-9	Acenaphthene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	208-96-8	Acenaphthylene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	67-64-1	Acetone	4.4	J	18	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	309-00-2	Aldrin	2.1	U	2.1	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	319-84-6	alpha-BHC	2.1	U	2.1	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7429-90-5	Aluminum	1000		0.02	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	120-12-7	Anthracene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-36-0	Antimony	2.4	UJ	2.4	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-38-2	Arsenic	2		0.01	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-39-3	Barium	21		0.94	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	71-43-2	Benzene	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	56-55-3	Benzo(a)anthracene	27	J	10	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	50-32-8	Benzo(a)pyrene	68	J	10	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	205-99-2	Benzo(b)fluoranthene	54	J	10	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	191-24-2	Benzo(g,h,i)perylene	52	J	10	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	207-08-9	Benzo(k)fluoranthene	72	J	10	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	85-68-7	Benzyl Butyl Phthalate	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-41-7	Beryllium	0.071	J	0.004	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	319-85-7	beta-BHC	2.1	U	2.1	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	111-91-1	bis(2-Chloroethoxy)methane	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	111-44-4	bis(2-Chloroethyl)ether	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	117-81-7	bis(2-Ethylhexyl)phthalate	30	J	10	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	75-27-4	Bromodichloromethane	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	75-25-2	Bromoform	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	74-83-9	Bromomethane	5.9	U	5.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-43-9	Cadmium	0.61	U	0.61	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-70-2	Calcium	1800	J	1.1	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	86-74-8	Carbazole	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	75-15-0	Carbon Disulfide	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	56-23-5	Carbon Tetrachloride	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	108-90-7	Chlorobenzene	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	124-48-1	Chlorodibromomethane	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	75-00-3	Chloroethane	5.9	U	5.9	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	67-66-3	Chloroform	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	74-87-3	Chloromethane	5.9	UJ	5.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-47-3	Chromium	2.5		0.01	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	218-01-9	Chrysene	28	J	10	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	10061-01-5	cis-1,3-Dichloropropene	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-48-4	Cobalt	2.6		0.01	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-50-8	Copper	2.4	U	2.4	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	75-99-0	Dalapon	2400	U	2400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	319-86-8	delta-BHC	2.1	U	2.1	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	53-70-3	Dibenzo(a,h)anthracene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	132-64-9	Dibenzofuran	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	1918-00-9	Dicamba	24	U	24	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	C-DICHLOROBI	Dichlorobiphenyl	4	U	4	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	75-09-2	Dichloromethane	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	120-36-5	Dichlorprop	120	U	120	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	60-57-1	Dieldrin	4	U	4	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	84-66-2	Diethyl Phthalate	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	131-11-3	Dimethyl Phthalate	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	84-74-2	Di-n-butylphthalate	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	117-84-0	Di-n-octylphthalate	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	88-85-7	Dinoseb	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	959-98-8	Endosulfan I	2.1	U	2.1	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	33213-65-9	Endosulfan II	4	U	4	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	1031-07-8	Endosulfan Sulfate	4	U	4	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	72-20-8	Endrin	4	U	4	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7421-93-4	Endrin Aldehyde	2.4	J	0.1	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	53494-70-5	Endrin Ketone	4	U	4	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	100-41-4	Ethylbenzene	2.2	J	0.83	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	206-44-0	Fluoranthene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	86-73-7	Fluorene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	58-89-9	gamma-BHC (Lindane)	2.1	U	2.1	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	5103-74-2	gamma-Chlordane	2.1	U	2.1	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	76-44-8	Heptachlor	2.1	U	2.1	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	1024-57-3	Heptachlor Epoxide	2.1	U	2.1	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	118-74-1	Hexachlorobenzene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	C-HEXACHLORO	Hexachlorobiphenyl	8.2	U	8.2	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	87-68-3	Hexachlorobutadiene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	77-47-4	Hexachlorocyclopentadiene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	67-72-1	Hexachloroethane	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	193-39-5	Indeno(1,2,3-cd)pyrene	29	J	10	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7439-89-6	Iron	4000		0.05	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	78-59-1	Isophorone	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7439-92-1	Lead	18	J	0.005	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7439-95-4	Magnesium	810		47	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7439-96-5	Manganese	62		0.01	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2400	U	2400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	93-65-2	MCPP	2400	U	2400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7439-97-6	Mercury	0.022	U	0.022	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	72-43-5	Methoxychlor	0.76	J	0.5	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	591-78-6	Methyl N-Butyl Ketone	15	U	15	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	C-MONOCHLORO	Monochlorobiphenyl	4	U	4	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	91-20-3	Naphthalene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-02-0	Nickel	5.8		0.04	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	98-95-3	Nitrobenzene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	621-64-7	N-Nitroso-di-n-propylamine	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	86-30-6	N-Nitrosodiphenylamine	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	C-NONACHLORO	Nonachlorobiphenyl	21	U	21	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	106-47-8	P-Chloroaniline	800	U	800	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	C-PENTBIPHEN	Pentachlorobiphenyl	8.2	U	8.2	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	87-86-5	Pentachlorophenol	21	U	21	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	PH	pH	7.4		1	units
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	85-01-8	Phenanthrene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	108-95-2	Phenol	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	100-01-6	P-Nitroaniline	2100	U	2100	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-09-7	Potassium	220		94	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	129-00-0	Pyrene	400	U	400	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-22-4	Silver	1.2	U	1.2	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-23-5	Sodium	120	U	120	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	100-42-5	Styrene (Monomer)	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	C-TETRACHLOR	Tetrachlorobiphenyl	8.2	U	8.2	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	127-18-4	Tetrachloroethene	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-28-0	Thallium	1.2	UJ	1.2	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	108-88-3	Toluene	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	E-10195	Total Organic Carbon	500	U	500	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	8001-35-2	Toxaphene	210	U	210	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	10061-02-6	trans-1,3-Dichloropropene	2.9	U	2.9	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	C-TRICHLOROB	Trichlorobiphenyl	4	U	4	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	79-01-6	Trichloroethylene	2.9	U	2.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-62-2	Vanadium	5		0.01	mg/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	75-01-4	Vinyl chloride	5.9	U	5.9	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	1330-20-7	Xylenes, Total	13		11	ug/kg
R4CM2S	R4CM1S	11/11/2002	Field Duplicate	7440-66-6	Zinc	14	J	0.02	mg/kg
R4AD1S		11/10/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	75-34-3	1,1-Dichloroethane	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	75-35-4	1,1-Dichloroethylene	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	107-06-2	1,2-Dichloroethane	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	6	U	6	ug/kg
R4AD1S		11/10/2002	Field Sample	78-87-5	1,2-Dichloropropane	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	93-76-5	2,4,5-T	10	U	10	ug/kg
R4AD1S		11/10/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg
R4AD1S		11/10/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	94-75-7	2,4-D	10	UJ	10	ug/kg
R4AD1S		11/10/2002	Field Sample	94-82-6	2,4-DB	10	U	10	ug/kg
R4AD1S		11/10/2002	Field Sample	120-83-2	2,4-Dichlorophenol	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	105-67-9	2,4-Dimethylphenol	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2100	U	2100	ug/kg
R4AD1S		11/10/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	78-93-3	2-Butanone (MEK)	15	U	15	ug/kg
R4AD1S		11/10/2002	Field Sample	91-58-7	2-Chloronaphthalene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	95-57-8	2-Chlorophenol	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	91-57-6	2-Methylnaphthalene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	88-74-4	2-Nitroaniline	2100	U	2100	ug/kg
R4AD1S		11/10/2002	Field Sample	88-75-5	2-Nitrophenol	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	820	U	820	ug/kg
R4AD1S		11/10/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	99-09-2	3-Nitroaniline	2100	U	2100	ug/kg
R4AD1S		11/10/2002	Field Sample	72-54-8	4,4'-DDD	4.1	U	4.1	ug/kg
R4AD1S		11/10/2002	Field Sample	72-55-9	4,4'-DDE	4.1	U	4.1	ug/kg
R4AD1S		11/10/2002	Field Sample	50-29-3	4,4'-DDT	4.1	U	4.1	ug/kg
R4AD1S		11/10/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2100	U	2100	ug/kg
R4AD1S		11/10/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	15	U	15	ug/kg
R4AD1S		11/10/2002	Field Sample	100-02-7	4-Nitrophenol	2100	U	2100	ug/kg
R4AD1S		11/10/2002	Field Sample	83-32-9	Acenaphthene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	208-96-8	Acenaphthylene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	67-64-1	Acetone	3	J	18	ug/kg
R4AD1S		11/10/2002	Field Sample	309-00-2	Aldrin	2.1	U	2.1	ug/kg
R4AD1S		11/10/2002	Field Sample	319-84-6	alpha-BHC	2.1	U	2.1	ug/kg
R4AD1S		11/10/2002	Field Sample	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/kg
R4AD1S		11/10/2002	Field Sample	7429-90-5	Aluminum	1100		0.02	mg/kg
R4AD1S		11/10/2002	Field Sample	120-12-7	Anthracene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	7440-36-0	Antimony	2.5	UJ	2.5	mg/kg
R4AD1S		11/10/2002	Field Sample	7440-38-2	Arsenic	1.9		0.01	mg/kg
R4AD1S		11/10/2002	Field Sample	7440-39-3	Barium	33		0.94	mg/kg
R4AD1S		11/10/2002	Field Sample	71-43-2	Benzene	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	56-55-3	Benzo(a)anthracene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	50-32-8	Benzo(a)pyrene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	7440-41-7	Beryllium	0.092	J	0.004	mg/kg
R4AD1S		11/10/2002	Field Sample	319-85-7	beta-BHC	2.1	U	2.1	ug/kg
R4AD1S		11/10/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	75-27-4	Bromodichloromethane	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	75-25-2	Bromoform	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	74-83-9	Bromomethane	6	U	6	ug/kg
R4AD1S		11/10/2002	Field Sample	7440-43-9	Cadmium	0.63	U	0.63	mg/kg
R4AD1S		11/10/2002	Field Sample	7440-70-2	Calcium	6400	J	1.1	mg/kg
R4AD1S		11/10/2002	Field Sample	86-74-8	Carbazole	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	75-15-0	Carbon Disulfide	3	U	3	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4AD1S		11/10/2002	Field Sample	56-23-5	Carbon Tetrachloride	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	108-90-7	Chlorobenzene	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	124-48-1	Chlorodibromomethane	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	75-00-3	Chloroethane	6	U	6	ug/kg
R4AD1S		11/10/2002	Field Sample	67-66-3	Chloroform	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	74-87-3	Chloromethane	6	UJ	6	ug/kg
R4AD1S		11/10/2002	Field Sample	7440-47-3	Chromium	2.9		0.01	mg/kg
R4AD1S		11/10/2002	Field Sample	218-01-9	Chrysene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	7440-48-4	Cobalt	2.2		0.01	mg/kg
R4AD1S		11/10/2002	Field Sample	7440-50-8	Copper	2.5	U	2.5	mg/kg
R4AD1S		11/10/2002	Field Sample	75-99-0	Dalapon	2500	U	2500	ug/kg
R4AD1S		11/10/2002	Field Sample	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg
R4AD1S		11/10/2002	Field Sample	319-86-8	delta-BHC	2.1	U	2.1	ug/kg
R4AD1S		11/10/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	132-64-9	Dibenzofuran	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	1918-00-9	Dicamba	25	U	25	ug/kg
R4AD1S		11/10/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.1	U	4.1	ug/kg
R4AD1S		11/10/2002	Field Sample	75-09-2	Dichloromethane	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/kg
R4AD1S		11/10/2002	Field Sample	60-57-1	Dieldrin	4.1	U	4.1	ug/kg
R4AD1S		11/10/2002	Field Sample	84-66-2	Diethyl Phthalate	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	131-11-3	Dimethyl Phthalate	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	84-74-2	Di-n-butylphthalate	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	117-84-0	Di-n-octylphthalate	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	88-85-7	Dinoseb	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	959-98-8	Endosulfan I	2.1	U	2.1	ug/kg
R4AD1S		11/10/2002	Field Sample	33213-65-9	Endosulfan II	4.1	U	4.1	ug/kg
R4AD1S		11/10/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.1	U	4.1	ug/kg
R4AD1S		11/10/2002	Field Sample	72-20-8	Endrin	4.1	U	4.1	ug/kg
R4AD1S		11/10/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.1	U	4.1	ug/kg
R4AD1S		11/10/2002	Field Sample	53494-70-5	Endrin Ketone	0.38	J	0.1	ug/kg
R4AD1S		11/10/2002	Field Sample	100-41-4	Ethylbenzene	1.6	J	0.83	ug/kg
R4AD1S		11/10/2002	Field Sample	206-44-0	Fluoranthene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	86-73-7	Fluorene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.1	U	2.1	ug/kg
R4AD1S		11/10/2002	Field Sample	5103-74-2	gamma-Chlordane	2.1	U	2.1	ug/kg
R4AD1S		11/10/2002	Field Sample	76-44-8	Heptachlor	0.33	J	0.05	ug/kg
R4AD1S		11/10/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.1	U	2.1	ug/kg
R4AD1S		11/10/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg
R4AD1S		11/10/2002	Field Sample	118-74-1	Hexachlorobenzene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.4	U	8.4	ug/kg
R4AD1S		11/10/2002	Field Sample	87-68-3	Hexachlorobutadiene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	67-72-1	Hexachloroethane	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	7439-89-6	Iron	4800		0.05	mg/kg
R4AD1S		11/10/2002	Field Sample	78-59-1	Isophorone	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	7439-92-1	Lead	7.7	J	0.005	mg/kg
R4AD1S		11/10/2002	Field Sample	7439-95-4	Magnesium	3000		47	mg/kg
R4AD1S		11/10/2002	Field Sample	7439-96-5	Manganese	67		0.01	mg/kg
R4AD1S		11/10/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2500	U	2500	ug/kg
R4AD1S		11/10/2002	Field Sample	93-65-2	MCPP	2500	U	2500	ug/kg
R4AD1S		11/10/2002	Field Sample	7439-97-6	Mercury	0.023	U	0.023	mg/kg
R4AD1S		11/10/2002	Field Sample	72-43-5	Methoxychlor	21	UJ	21	ug/kg
R4AD1S		11/10/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	15	U	15	ug/kg
R4AD1S		11/10/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	4.1	U	4.1	ug/kg
R4AD1S		11/10/2002	Field Sample	91-20-3	Naphthalene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	7440-02-0	Nickel	5.8		0.04	mg/kg
R4AD1S		11/10/2002	Field Sample	98-95-3	Nitrobenzene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	21	U	21	ug/kg
R4AD1S		11/10/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg
R4AD1S		11/10/2002	Field Sample	106-47-8	P-Chloroaniline	820	U	820	ug/kg
R4AD1S		11/10/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.4	U	8.4	ug/kg
R4AD1S		11/10/2002	Field Sample	87-86-5	Pentachlorophenol	21	U	21	ug/kg
R4AD1S		11/10/2002	Field Sample	PH	pH	7.5		1	units
R4AD1S		11/10/2002	Field Sample	85-01-8	Phenanthrene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	108-95-2	Phenol	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	100-01-6	P-Nitroaniline	2100	U	2100	ug/kg
R4AD1S		11/10/2002	Field Sample	7440-09-7	Potassium	200		94	mg/kg
R4AD1S		11/10/2002	Field Sample	129-00-0	Pyrene	410	U	410	ug/kg
R4AD1S		11/10/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R4AD1S		11/10/2002	Field Sample	7440-22-4	Silver	1.2	U	1.2	mg/kg
R4AD1S		11/10/2002	Field Sample	7440-23-5	Sodium	140	U	140	mg/kg
R4AD1S		11/10/2002	Field Sample	100-42-5	Styrene (Monomer)	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.4	U	8.4	ug/kg
R4AD1S		11/10/2002	Field Sample	127-18-4	Tetrachloroethene	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	7440-28-0	Thallium	1.2	UJ	1.2	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4AD1S		11/10/2002	Field Sample	108-88-3	Toluene	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R4AD1S		11/10/2002	Field Sample	8001-35-2	Toxaphene	210	U	210	ug/kg
R4AD1S		11/10/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.1	U	4.1	ug/kg
R4AD1S		11/10/2002	Field Sample	79-01-6	Trichloroethylene	3	U	3	ug/kg
R4AD1S		11/10/2002	Field Sample	7440-62-2	Vanadium	5.1		0.01	mg/kg
R4AD1S		11/10/2002	Field Sample	75-01-4	Vinyl chloride	6	U	6	ug/kg
R4AD1S		11/10/2002	Field Sample	1330-20-7	Xylenes, Total	9.8		11	ug/kg
R4AD1S		11/10/2002	Field Sample	7440-66-6	Zinc	40	J	0.02	mg/kg
R4BD1S		11/10/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	5	U	5	ug/kg
R4BD1S		11/10/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	93-76-5	2,4,5-T	10	U	10	ug/kg
R4BD1S		11/10/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg
R4BD1S		11/10/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	94-75-7	2,4-D	10	UJ	10	ug/kg
R4BD1S		11/10/2002	Field Sample	94-82-6	2,4-DB	10	U	10	ug/kg
R4BD1S		11/10/2002	Field Sample	120-83-2	2,4-Dichlorophenol	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	105-67-9	2,4-Dimethylphenol	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2100	U	2100	ug/kg
R4BD1S		11/10/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	78-93-3	2-Butanone (MEK)	12	U	12	ug/kg
R4BD1S		11/10/2002	Field Sample	91-58-7	2-Chloronaphthalene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	95-57-8	2-Chlorophenol	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	91-57-6	2-Methylnaphthalene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	88-74-4	2-Nitroaniline	2100	U	2100	ug/kg
R4BD1S		11/10/2002	Field Sample	88-75-5	2-Nitrophenol	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	800	U	800	ug/kg
R4BD1S		11/10/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	99-09-2	3-Nitroaniline	2100	U	2100	ug/kg
R4BD1S		11/10/2002	Field Sample	72-54-8	4,4'-DDD	4	U	4	ug/kg
R4BD1S		11/10/2002	Field Sample	72-55-9	4,4'-DDE	4	U	4	ug/kg
R4BD1S		11/10/2002	Field Sample	50-29-3	4,4'-DDT	4	U	4	ug/kg
R4BD1S		11/10/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2100	U	2100	ug/kg
R4BD1S		11/10/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	12	ug/kg
R4BD1S		11/10/2002	Field Sample	100-02-7	4-Nitrophenol	2100	U	2100	ug/kg
R4BD1S		11/10/2002	Field Sample	83-32-9	Acenaphthene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	208-96-8	Acenaphthylene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	67-64-1	Acetone	25	U	25	ug/kg
R4BD1S		11/10/2002	Field Sample	309-00-2	Aldrin	2.1	U	2.1	ug/kg
R4BD1S		11/10/2002	Field Sample	319-84-6	alpha-BHC	2.1	U	2.1	ug/kg
R4BD1S		11/10/2002	Field Sample	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/kg
R4BD1S		11/10/2002	Field Sample	7429-90-5	Aluminum	630		0.02	mg/kg
R4BD1S		11/10/2002	Field Sample	120-12-7	Anthracene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	7440-36-0	Antimony	2.2	UJ	2.2	mg/kg
R4BD1S		11/10/2002	Field Sample	7440-38-2	Arsenic	1.8		0.01	mg/kg
R4BD1S		11/10/2002	Field Sample	7440-39-3	Barium	15		0.94	mg/kg
R4BD1S		11/10/2002	Field Sample	71-43-2	Benzene	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	56-55-3	Benzo(a)anthracene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	50-32-8	Benzo(a)pyrene	37	J	10	ug/kg
R4BD1S		11/10/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	29	J	10	ug/kg
R4BD1S		11/10/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	7440-41-7	Beryllium	0.05	J	0.004	mg/kg
R4BD1S		11/10/2002	Field Sample	319-85-7	beta-BHC	2.1	U	2.1	ug/kg
R4BD1S		11/10/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	75-27-4	Bromodichloromethane	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	75-25-2	Bromoform	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	74-83-9	Bromomethane	5	U	5	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4BD1S		11/10/2002	Field Sample	7440-43-9	Cadmium	0.61	U	0.61	mg/kg
R4BD1S		11/10/2002	Field Sample	7440-70-2	Calcium	1600	J	1.1	mg/kg
R4BD1S		11/10/2002	Field Sample	86-74-8	Carbazole	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	75-15-0	Carbon Disulfide	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	108-90-7	Chlorobenzene	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	124-48-1	Chlorodibromomethane	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	75-00-3	Chloroethane	5	U	5	ug/kg
R4BD1S		11/10/2002	Field Sample	67-66-3	Chloroform	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	74-87-3	Chloromethane	5	UJ	5	ug/kg
R4BD1S		11/10/2002	Field Sample	7440-47-3	Chromium	1.8		0.01	mg/kg
R4BD1S		11/10/2002	Field Sample	218-01-9	Chrysene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	7440-48-4	Cobalt	1.6		0.01	mg/kg
R4BD1S		11/10/2002	Field Sample	7440-50-8	Copper	2.4	U	2.4	mg/kg
R4BD1S		11/10/2002	Field Sample	75-99-0	Dalapon	2400	U	2400	ug/kg
R4BD1S		11/10/2002	Field Sample	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg
R4BD1S		11/10/2002	Field Sample	319-86-8	delta-BHC	2.1	U	2.1	ug/kg
R4BD1S		11/10/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	132-64-9	Dibenzofuran	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	1918-00-9	Dicamba	24	U	24	ug/kg
R4BD1S		11/10/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4	U	4	ug/kg
R4BD1S		11/10/2002	Field Sample	75-09-2	Dichloromethane	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/kg
R4BD1S		11/10/2002	Field Sample	60-57-1	Dieldrin	4	U	4	ug/kg
R4BD1S		11/10/2002	Field Sample	84-66-2	Diethyl Phthalate	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	131-11-3	Dimethyl Phthalate	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	84-74-2	Di-n-butylphthalate	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	117-84-0	Di-n-octylphthalate	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	88-85-7	Dinoseb	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	959-98-8	Endosulfan I	2.1	U	2.1	ug/kg
R4BD1S		11/10/2002	Field Sample	33213-65-9	Endosulfan II	4	U	4	ug/kg
R4BD1S		11/10/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4	U	4	ug/kg
R4BD1S		11/10/2002	Field Sample	72-20-8	Endrin	4	U	4	ug/kg
R4BD1S		11/10/2002	Field Sample	7421-93-4	Endrin Aldehyde	2.1	J	0.1	ug/kg
R4BD1S		11/10/2002	Field Sample	53494-70-5	Endrin Ketone	4	U	4	ug/kg
R4BD1S		11/10/2002	Field Sample	100-41-4	Ethylbenzene	1	J	0.83	ug/kg
R4BD1S		11/10/2002	Field Sample	206-44-0	Fluoranthene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	86-73-7	Fluorene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.1	U	2.1	ug/kg
R4BD1S		11/10/2002	Field Sample	5103-74-2	gamma-Chlordane	2.1	U	2.1	ug/kg
R4BD1S		11/10/2002	Field Sample	76-44-8	Heptachlor	2.1	U	2.1	ug/kg
R4BD1S		11/10/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.1	U	2.1	ug/kg
R4BD1S		11/10/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg
R4BD1S		11/10/2002	Field Sample	118-74-1	Hexachlorobenzene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.2	U	8.2	ug/kg
R4BD1S		11/10/2002	Field Sample	87-68-3	Hexachlorobutadiene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	67-72-1	Hexachloroethane	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	7439-89-6	Iron	2700		0.05	mg/kg
R4BD1S		11/10/2002	Field Sample	78-59-1	Isophorone	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	7439-92-1	Lead	4.2	J	0.005	mg/kg
R4BD1S		11/10/2002	Field Sample	7439-95-4	Magnesium	680		47	mg/kg
R4BD1S		11/10/2002	Field Sample	7439-96-5	Manganese	53		0.01	mg/kg
R4BD1S		11/10/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2400	U	2400	ug/kg
R4BD1S		11/10/2002	Field Sample	93-65-2	MCPP	2400	U	2400	ug/kg
R4BD1S		11/10/2002	Field Sample	7439-97-6	Mercury	0.02	U	0.02	mg/kg
R4BD1S		11/10/2002	Field Sample	72-43-5	Methoxychlor	3.3	J	0.5	ug/kg
R4BD1S		11/10/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	12	U	12	ug/kg
R4BD1S		11/10/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	4	U	4	ug/kg
R4BD1S		11/10/2002	Field Sample	91-20-3	Naphthalene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	7440-02-0	Nickel	3.6	J	0.04	mg/kg
R4BD1S		11/10/2002	Field Sample	98-95-3	Nitrobenzene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	21	U	21	ug/kg
R4BD1S		11/10/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg
R4BD1S		11/10/2002	Field Sample	106-47-8	P-Chloroaniline	800	U	800	ug/kg
R4BD1S		11/10/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.2	U	8.2	ug/kg
R4BD1S		11/10/2002	Field Sample	87-86-5	Pentachlorophenol	21	U	21	ug/kg
R4BD1S		11/10/2002	Field Sample	PH	pH	7.5		1	units
R4BD1S		11/10/2002	Field Sample	85-01-8	Phenanthrene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	108-95-2	Phenol	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	100-01-6	P-Nitroaniline	2100	U	2100	ug/kg
R4BD1S		11/10/2002	Field Sample	7440-09-7	Potassium	140		94	mg/kg
R4BD1S		11/10/2002	Field Sample	129-00-0	Pyrene	400	U	400	ug/kg
R4BD1S		11/10/2002	Field Sample	7782-49-2	Selenium	1.1	U	1.1	mg/kg
R4BD1S		11/10/2002	Field Sample	7440-22-4	Silver	1.1	U	1.1	mg/kg
R4BD1S		11/10/2002	Field Sample	7440-23-5	Sodium	110	U	110	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R4BD1S		11/10/2002	Field Sample	100-42-5	Styrene (Monomer)	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.2	U	8.2	ug/kg
R4BD1S		11/10/2002	Field Sample	127-18-4	Tetrachloroethene	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	7440-28-0	Thallium	1.1	UJ	1.1	mg/kg
R4BD1S		11/10/2002	Field Sample	108-88-3	Toluene	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	E-10195	Total Organic Carbon	2400		500	mg/kg
R4BD1S		11/10/2002	Field Sample	8001-35-2	Toxaphene	210	U	210	ug/kg
R4BD1S		11/10/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4	U	4	ug/kg
R4BD1S		11/10/2002	Field Sample	79-01-6	Trichloroethylene	2.5	U	2.5	ug/kg
R4BD1S		11/10/2002	Field Sample	7440-62-2	Vanadium	3.7		0.01	mg/kg
R4BD1S		11/10/2002	Field Sample	75-01-4	Vinyl chloride	5	U	5	ug/kg
R4BD1S		11/10/2002	Field Sample	1330-20-7	Xylenes, Total	5.9		11	ug/kg
R4BD1S		11/10/2002	Field Sample	7440-66-6	Zinc	53	J	0.02	mg/kg
R5AN1S		11/17/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	93-76-5	2,4,5-T	10	R	10	ug/kg
R5AN1S		11/17/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	10	R	10	ug/kg
R5AN1S		11/17/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	94-75-7	2,4-D	7.9	J	0.5	ug/kg
R5AN1S		11/17/2002	Field Sample	94-82-6	2,4-DB	10	R	10	ug/kg
R5AN1S		11/17/2002	Field Sample	120-83-2	2,4-Dichlorophenol	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	105-67-9	2,4-Dimethylphenol	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2100	UJ	2100	ug/kg
R5AN1S		11/17/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	78-93-3	2-Butanone (MEK)	13	U	13	ug/kg
R5AN1S		11/17/2002	Field Sample	91-58-7	2-Chloronaphthalene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	95-57-8	2-Chlorophenol	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	91-57-6	2-Methylnaphthalene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	88-74-4	2-Nitroaniline	2100	UJ	2100	ug/kg
R5AN1S		11/17/2002	Field Sample	88-75-5	2-Nitrophenol	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	800	U	800	ug/kg
R5AN1S		11/17/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	99-09-2	3-Nitroaniline	2100	UJ	2100	ug/kg
R5AN1S		11/17/2002	Field Sample	72-54-8	4,4'-DDD	4	UJ	4	ug/kg
R5AN1S		11/17/2002	Field Sample	72-55-9	4,4'-DDE	4	U	4	ug/kg
R5AN1S		11/17/2002	Field Sample	50-29-3	4,4'-DDT	4	R	4	ug/kg
R5AN1S		11/17/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2100	U	2100	ug/kg
R5AN1S		11/17/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	13	ug/kg
R5AN1S		11/17/2002	Field Sample	100-02-7	4-Nitrophenol	2100	U	2100	ug/kg
R5AN1S		11/17/2002	Field Sample	83-32-9	Acenaphthene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	208-96-8	Acenaphthylene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	67-64-1	Acetone	290	J	18	ug/kg
R5AN1S		11/17/2002	Field Sample	309-00-2	Aldrin	2.1	U	2.1	ug/kg
R5AN1S		11/17/2002	Field Sample	319-84-6	alpha-BHC	2.1	U	2.1	ug/kg
R5AN1S		11/17/2002	Field Sample	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/kg
R5AN1S		11/17/2002	Field Sample	7429-90-5	Aluminum	1800		0.02	mg/kg
R5AN1S		11/17/2002	Field Sample	120-12-7	Anthracene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	7440-36-0	Antimony	2.4	U	2.4	mg/kg
R5AN1S		11/17/2002	Field Sample	7440-38-2	Arsenic	2		0.01	mg/kg
R5AN1S		11/17/2002	Field Sample	7440-39-3	Barium	47		0.94	mg/kg
R5AN1S		11/17/2002	Field Sample	71-43-2	Benzene	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	56-55-3	Benzo(a)anthracene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	50-32-8	Benzo(a)pyrene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	7440-41-7	Beryllium	0.49	U	0.49	mg/kg
R5AN1S		11/17/2002	Field Sample	319-85-7	beta-BHC	2.1	U	2.1	ug/kg
R5AN1S		11/17/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	400	U	400	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5AN1S		11/17/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	75-27-4	Bromodichloromethane	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	75-25-2	Bromoform	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	74-83-9	Bromomethane	5.2	UJ	5.2	ug/kg
R5AN1S		11/17/2002	Field Sample	7440-43-9	Cadmium	0.61	UJ	0.61	mg/kg
R5AN1S		11/17/2002	Field Sample	7440-70-2	Calcium	3700		1.1	mg/kg
R5AN1S		11/17/2002	Field Sample	86-74-8	Carbazole	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	75-15-0	Carbon Disulfide	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	108-90-7	Chlorobenzene	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	124-48-1	Chlorodibromomethane	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	75-00-3	Chloroethane	5.2	U	5.2	ug/kg
R5AN1S		11/17/2002	Field Sample	67-66-3	Chloroform	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	74-87-3	Chloromethane	5.2	UJ	5.2	ug/kg
R5AN1S		11/17/2002	Field Sample	7440-47-3	Chromium	4.9		0.01	mg/kg
R5AN1S		11/17/2002	Field Sample	218-01-9	Chrysene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	7440-48-4	Cobalt	2.8		0.01	mg/kg
R5AN1S		11/17/2002	Field Sample	7440-50-8	Copper	3		0.01	mg/kg
R5AN1S		11/17/2002	Field Sample	75-99-0	Dalapon	2400	R	2400	ug/kg
R5AN1S		11/17/2002	Field Sample	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg
R5AN1S		11/17/2002	Field Sample	319-86-8	delta-BHC	2.1	U	2.1	ug/kg
R5AN1S		11/17/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	132-64-9	Dibenzofuran	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	1918-00-9	Dicamba	24	R	24	ug/kg
R5AN1S		11/17/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4	U	4	ug/kg
R5AN1S		11/17/2002	Field Sample	75-09-2	Dichloromethane	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	120-36-5	Dichlorprop	120	R	120	ug/kg
R5AN1S		11/17/2002	Field Sample	60-57-1	Dieldrin	4	U	4	ug/kg
R5AN1S		11/17/2002	Field Sample	84-66-2	Diethyl Phthalate	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	131-11-3	Dimethyl Phthalate	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	84-74-2	Di-n-butylphthalate	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	117-84-0	Di-n-octylphthalate	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	88-85-7	Dinoseb	400	UJ	400	ug/kg
R5AN1S		11/17/2002	Field Sample	959-98-8	Endosulfan I	2.1	U	2.1	ug/kg
R5AN1S		11/17/2002	Field Sample	33213-65-9	Endosulfan II	4	U	4	ug/kg
R5AN1S		11/17/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4	U	4	ug/kg
R5AN1S		11/17/2002	Field Sample	72-20-8	Endrin	4	U	4	ug/kg
R5AN1S		11/17/2002	Field Sample	7421-93-4	Endrin Aldehyde	4	U	4	ug/kg
R5AN1S		11/17/2002	Field Sample	53494-70-5	Endrin Ketone	0.51	J	0.1	ug/kg
R5AN1S		11/17/2002	Field Sample	100-41-4	Ethylbenzene	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	206-44-0	Fluoranthene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	86-73-7	Fluorene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.1	U	2.1	ug/kg
R5AN1S		11/17/2002	Field Sample	5103-74-2	gamma-Chlordane	2.1	U	2.1	ug/kg
R5AN1S		11/17/2002	Field Sample	76-44-8	Heptachlor	2.1	UJ	2.1	ug/kg
R5AN1S		11/17/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.1	U	2.1	ug/kg
R5AN1S		11/17/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg
R5AN1S		11/17/2002	Field Sample	118-74-1	Hexachlorobenzene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.2	U	8.2	ug/kg
R5AN1S		11/17/2002	Field Sample	87-68-3	Hexachlorobutadiene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	400	UJ	400	ug/kg
R5AN1S		11/17/2002	Field Sample	67-72-1	Hexachloroethane	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	7439-89-6	Iron	5600		0.05	mg/kg
R5AN1S		11/17/2002	Field Sample	78-59-1	Isophorone	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	7439-92-1	Lead	8.1		0.005	mg/kg
R5AN1S		11/17/2002	Field Sample	7439-95-4	Magnesium	1300		47	mg/kg
R5AN1S		11/17/2002	Field Sample	7439-96-5	Manganese	99		0.01	mg/kg
R5AN1S		11/17/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2400	R	2400	ug/kg
R5AN1S		11/17/2002	Field Sample	93-65-2	MCPP	2400	R	2400	ug/kg
R5AN1S		11/17/2002	Field Sample	7439-97-6	Mercury	0.006	J	0.017	mg/kg
R5AN1S		11/17/2002	Field Sample	72-43-5	Methoxychlor	21	UJ	21	ug/kg
R5AN1S		11/17/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	13	U	13	ug/kg
R5AN1S		11/17/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	4	U	4	ug/kg
R5AN1S		11/17/2002	Field Sample	91-20-3	Naphthalene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	7440-02-0	Nickel	6.3		0.04	mg/kg
R5AN1S		11/17/2002	Field Sample	98-95-3	Nitrobenzene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	21	U	21	ug/kg
R5AN1S		11/17/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg
R5AN1S		11/17/2002	Field Sample	106-47-8	P-Chloroaniline	800	U	800	ug/kg
R5AN1S		11/17/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.2	U	8.2	ug/kg
R5AN1S		11/17/2002	Field Sample	87-86-5	Pentachlorophenol	21	R	21	ug/kg
R5AN1S		11/17/2002	Field Sample	PH	pH	7.3		1	units
R5AN1S		11/17/2002	Field Sample	85-01-8	Phenanthrene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	108-95-2	Phenol	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	100-01-6	P-Nitroaniline	2100	U	2100	ug/kg
R5AN1S		11/17/2002	Field Sample	7440-09-7	Potassium	280		94	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5AN1S		11/17/2002	Field Sample	129-00-0	Pyrene	400	U	400	ug/kg
R5AN1S		11/17/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R5AN1S		11/17/2002	Field Sample	7440-22-4	Silver	1.2	UJ	1.2	mg/kg
R5AN1S		11/17/2002	Field Sample	7440-23-5	Sodium	32	J	100	mg/kg
R5AN1S		11/17/2002	Field Sample	100-42-5	Styrene (Monomer)	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.2	U	8.2	ug/kg
R5AN1S		11/17/2002	Field Sample	127-18-4	Tetrachloroethene	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	7440-28-0	Thallium	1.2	U	1.2	mg/kg
R5AN1S		11/17/2002	Field Sample	108-88-3	Toluene	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	E-10195	Total Organic Carbon	2400		500	mg/kg
R5AN1S		11/17/2002	Field Sample	8001-35-2	Toxaphene	210	U	210	ug/kg
R5AN1S		11/17/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4	U	4	ug/kg
R5AN1S		11/17/2002	Field Sample	79-01-6	Trichloroethylene	2.6	U	2.6	ug/kg
R5AN1S		11/17/2002	Field Sample	7440-62-2	Vanadium	7.5		0.01	mg/kg
R5AN1S		11/17/2002	Field Sample	75-01-4	Vinyl chloride	5.2	U	5.2	ug/kg
R5AN1S		11/17/2002	Field Sample	1330-20-7	Xylenes, Total	3.9	J	11	ug/kg
R5AN1S		11/17/2002	Field Sample	7440-66-6	Zinc	42	J	0.02	mg/kg
R5BN1S		11/17/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	75-34-3	1,1-Dichloroethane	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	75-35-4	1,1-Dichloroethylene	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	107-06-2	1,2-Dichloroethane	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	78-87-5	1,2-Dichloropropane	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	93-76-5	2,4,5-T	12	R	12	ug/kg
R5BN1S		11/17/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	12	R	12	ug/kg
R5BN1S		11/17/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	94-75-7	2,4-D	13	J	0.5	ug/kg
R5BN1S		11/17/2002	Field Sample	94-82-6	2,4-DB	12	R	12	ug/kg
R5BN1S		11/17/2002	Field Sample	120-83-2	2,4-Dichlorophenol	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	105-67-9	2,4-Dimethylphenol	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2500	UJ	2500	ug/kg
R5BN1S		11/17/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	78-93-3	2-Butanone (MEK)	21	U	21	ug/kg
R5BN1S		11/17/2002	Field Sample	91-58-7	2-Chloronaphthalene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	95-57-8	2-Chlorophenol	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	91-57-6	2-Methylnaphthalene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	88-74-4	2-Nitroaniline	2500	UJ	2500	ug/kg
R5BN1S		11/17/2002	Field Sample	88-75-5	2-Nitrophenol	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	980	U	980	ug/kg
R5BN1S		11/17/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	99-09-2	3-Nitroaniline	2500	UJ	2500	ug/kg
R5BN1S		11/17/2002	Field Sample	72-54-8	4,4'-DDD	4.9	UJ	4.9	ug/kg
R5BN1S		11/17/2002	Field Sample	72-55-9	4,4'-DDE	4.9	U	4.9	ug/kg
R5BN1S		11/17/2002	Field Sample	50-29-3	4,4'-DDT	4.9	R	4.9	ug/kg
R5BN1S		11/17/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
R5BN1S		11/17/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	21	U	21	ug/kg
R5BN1S		11/17/2002	Field Sample	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
R5BN1S		11/17/2002	Field Sample	83-32-9	Acenaphthene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	208-96-8	Acenaphthylene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	67-64-1	Acetone	17	J	18	ug/kg
R5BN1S		11/17/2002	Field Sample	309-00-2	Aldrin	2.5	U	2.5	ug/kg
R5BN1S		11/17/2002	Field Sample	319-84-6	alpha-BHC	2.5	U	2.5	ug/kg
R5BN1S		11/17/2002	Field Sample	5103-71-9	alpha-Chlordane	2.5	U	2.5	ug/kg
R5BN1S		11/17/2002	Field Sample	7429-90-5	Aluminum	4700		0.02	mg/kg
R5BN1S		11/17/2002	Field Sample	120-12-7	Anthracene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	7440-36-0	Antimony	3	U	3	mg/kg
R5BN1S		11/17/2002	Field Sample	7440-38-2	Arsenic	4.8		0.01	mg/kg
R5BN1S		11/17/2002	Field Sample	7440-39-3	Barium	97		0.94	mg/kg
R5BN1S		11/17/2002	Field Sample	71-43-2	Benzene	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	56-55-3	Benzo(a)anthracene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	50-32-8	Benzo(a)pyrene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	490	U	490	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5BN1S		11/17/2002	Field Sample	7440-41-7	Beryllium	0.36	J	0.004	mg/kg
R5BN1S		11/17/2002	Field Sample	319-85-7	beta-BHC	2.5	U	2.5	ug/kg
R5BN1S		11/17/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	75-27-4	Bromodichloromethane	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	75-25-2	Bromoform	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	74-83-9	Bromomethane	8.6	UJ	8.6	ug/kg
R5BN1S		11/17/2002	Field Sample	7440-43-9	Cadmium	0.75	UJ	0.75	mg/kg
R5BN1S		11/17/2002	Field Sample	7440-70-2	Calcium	8500		1.1	mg/kg
R5BN1S		11/17/2002	Field Sample	86-74-8	Carbazole	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	75-15-0	Carbon Disulfide	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	56-23-5	Carbon Tetrachloride	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	108-90-7	Chlorobenzene	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	124-48-1	Chlorodibromomethane	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	75-00-3	Chloroethane	8.6	U	8.6	ug/kg
R5BN1S		11/17/2002	Field Sample	67-66-3	Chloroform	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	74-87-3	Chloromethane	8.6	UJ	8.6	ug/kg
R5BN1S		11/17/2002	Field Sample	7440-47-3	Chromium	9.4		0.01	mg/kg
R5BN1S		11/17/2002	Field Sample	218-01-9	Chrysene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	7440-48-4	Cobalt	5		0.01	mg/kg
R5BN1S		11/17/2002	Field Sample	7440-50-8	Copper	9		0.01	mg/kg
R5BN1S		11/17/2002	Field Sample	75-99-0	Dalapon	3000	R	3000	ug/kg
R5BN1S		11/17/2002	Field Sample	2051-24-3	Decachlorobiphenyl	25	U	25	ug/kg
R5BN1S		11/17/2002	Field Sample	319-86-8	delta-BHC	2.5	U	2.5	ug/kg
R5BN1S		11/17/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	132-64-9	Dibenzofuran	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	1918-00-9	Dicamba	30	R	30	ug/kg
R5BN1S		11/17/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.9	U	4.9	ug/kg
R5BN1S		11/17/2002	Field Sample	75-09-2	Dichloromethane	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	120-36-5	Dichlorprop	150	R	150	ug/kg
R5BN1S		11/17/2002	Field Sample	60-57-1	Dieldrin	4.9	U	4.9	ug/kg
R5BN1S		11/17/2002	Field Sample	84-66-2	Diethyl Phthalate	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	131-11-3	Dimethyl Phthalate	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	84-74-2	Di-n-butylphthalate	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	117-84-0	Di-n-octylphthalate	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	88-85-7	Dinoseb	490	UJ	490	ug/kg
R5BN1S		11/17/2002	Field Sample	959-98-8	Endosulfan I	2.5	U	2.5	ug/kg
R5BN1S		11/17/2002	Field Sample	33213-65-9	Endosulfan II	4.9	U	4.9	ug/kg
R5BN1S		11/17/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.9	U	4.9	ug/kg
R5BN1S		11/17/2002	Field Sample	72-20-8	Endrin	4.9	U	4.9	ug/kg
R5BN1S		11/17/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.9	U	4.9	ug/kg
R5BN1S		11/17/2002	Field Sample	53494-70-5	Endrin Ketone	0.65	J	0.1	ug/kg
R5BN1S		11/17/2002	Field Sample	100-41-4	Ethylbenzene	2.3	J	0.83	ug/kg
R5BN1S		11/17/2002	Field Sample	206-44-0	Fluoranthene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	86-73-7	Fluorene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.5	U	2.5	ug/kg
R5BN1S		11/17/2002	Field Sample	5103-74-2	gamma-Chlordane	2.5	U	2.5	ug/kg
R5BN1S		11/17/2002	Field Sample	76-44-8	Heptachlor	2.5	UJ	2.5	ug/kg
R5BN1S		11/17/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.5	U	2.5	ug/kg
R5BN1S		11/17/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	15	U	15	ug/kg
R5BN1S		11/17/2002	Field Sample	118-74-1	Hexachlorobenzene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	10	U	10	ug/kg
R5BN1S		11/17/2002	Field Sample	87-68-3	Hexachlorobutadiene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	490	UJ	490	ug/kg
R5BN1S		11/17/2002	Field Sample	67-72-1	Hexachloroethane	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	7439-89-6	Iron	11000		0.05	mg/kg
R5BN1S		11/17/2002	Field Sample	78-59-1	Isophorone	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	7439-92-1	Lead	15		0.005	mg/kg
R5BN1S		11/17/2002	Field Sample	7439-95-4	Magnesium	2900		47	mg/kg
R5BN1S		11/17/2002	Field Sample	7439-96-5	Manganese	370		0.01	mg/kg
R5BN1S		11/17/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	3000	R	3000	ug/kg
R5BN1S		11/17/2002	Field Sample	93-65-2	MCPP	3000	R	3000	ug/kg
R5BN1S		11/17/2002	Field Sample	7439-97-6	Mercury	0.02	J	0.017	mg/kg
R5BN1S		11/17/2002	Field Sample	72-43-5	Methoxychlor	25	UJ	25	ug/kg
R5BN1S		11/17/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	21	U	21	ug/kg
R5BN1S		11/17/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	4.9	U	4.9	ug/kg
R5BN1S		11/17/2002	Field Sample	91-20-3	Naphthalene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	7440-02-0	Nickel	11		0.04	mg/kg
R5BN1S		11/17/2002	Field Sample	98-95-3	Nitrobenzene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	25	U	25	ug/kg
R5BN1S		11/17/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	15	U	15	ug/kg
R5BN1S		11/17/2002	Field Sample	106-47-8	P-Chloroaniline	980	U	980	ug/kg
R5BN1S		11/17/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	10	U	10	ug/kg
R5BN1S		11/17/2002	Field Sample	87-86-5	Pentachlorophenol	25	R	25	ug/kg
R5BN1S		11/17/2002	Field Sample	PH	pH	7.1		1	units

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5BN1S		11/17/2002	Field Sample	85-01-8	Phenanthrene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	108-95-2	Phenol	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	100-01-6	P-Nitroaniline	2500	U	2500	ug/kg
R5BN1S		11/17/2002	Field Sample	7440-09-7	Potassium	660		94	mg/kg
R5BN1S		11/17/2002	Field Sample	129-00-0	Pyrene	490	U	490	ug/kg
R5BN1S		11/17/2002	Field Sample	7782-49-2	Selenium	1.5	U	1.5	mg/kg
R5BN1S		11/17/2002	Field Sample	7440-22-4	Silver	1.5	UJ	1.5	mg/kg
R5BN1S		11/17/2002	Field Sample	7440-23-5	Sodium	67	J	100	mg/kg
R5BN1S		11/17/2002	Field Sample	100-42-5	Styrene (Monomer)	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	10	U	10	ug/kg
R5BN1S		11/17/2002	Field Sample	127-18-4	Tetrachloroethene	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	7440-28-0	Thallium	1.5	U	1.5	mg/kg
R5BN1S		11/17/2002	Field Sample	108-88-3	Toluene	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	E-10195	Total Organic Carbon	9500		500	mg/kg
R5BN1S		11/17/2002	Field Sample	8001-35-2	Toxaphene	250	U	250	ug/kg
R5BN1S		11/17/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.9	U	4.9	ug/kg
R5BN1S		11/17/2002	Field Sample	79-01-6	Trichloroethylene	4.3	U	4.3	ug/kg
R5BN1S		11/17/2002	Field Sample	7440-62-2	Vanadium	13		0.01	mg/kg
R5BN1S		11/17/2002	Field Sample	75-01-4	Vinyl chloride	8.6	U	8.6	ug/kg
R5BN1S		11/17/2002	Field Sample	1330-20-7	Xylenes, Total	14		11	ug/kg
R5BN1S		11/17/2002	Field Sample	7440-66-6	Zinc	97	J	0.02	mg/kg
R5AU1S		11/08/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	75-34-3	1,1-Dichloroethane	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	75-35-4	1,1-Dichloroethylene	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	107-06-2	1,2-Dichloroethane	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	14	U	14	ug/kg
R5AU1S		11/08/2002	Field Sample	78-87-5	1,2-Dichloropropane	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	93-76-5	2,4,5-T	12	U	12	ug/kg
R5AU1S		11/08/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	12	U	12	ug/kg
R5AU1S		11/08/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	94-75-7	2,4-D	9.2	J	0.5	ug/kg
R5AU1S		11/08/2002	Field Sample	94-82-6	2,4-DB	12	U	12	ug/kg
R5AU1S		11/08/2002	Field Sample	120-83-2	2,4-Dichlorophenol	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	105-67-9	2,4-Dimethylphenol	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2400	U	2400	ug/kg
R5AU1S		11/08/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	78-93-3	2-Butanone (MEK)	35	U	35	ug/kg
R5AU1S		11/08/2002	Field Sample	91-58-7	2-Chloronaphthalene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	95-57-8	2-Chlorophenol	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	91-57-6	2-Methylnaphthalene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	88-74-4	2-Nitroaniline	2400	U	2400	ug/kg
R5AU1S		11/08/2002	Field Sample	88-75-5	2-Nitrophenol	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	920	U	920	ug/kg
R5AU1S		11/08/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	99-09-2	3-Nitroaniline	2400	U	2400	ug/kg
R5AU1S		11/08/2002	Field Sample	72-54-8	4,4'-DDD	4.6	UJ	4.6	ug/kg
R5AU1S		11/08/2002	Field Sample	72-55-9	4,4'-DDE	0.51	J	0.1	ug/kg
R5AU1S		11/08/2002	Field Sample	50-29-3	4,4'-DDT	0.5	J	0.1	ug/kg
R5AU1S		11/08/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2400	U	2400	ug/kg
R5AU1S		11/08/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	35	U	35	ug/kg
R5AU1S		11/08/2002	Field Sample	100-02-7	4-Nitrophenol	2400	U	2400	ug/kg
R5AU1S		11/08/2002	Field Sample	83-32-9	Acenaphthene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	208-96-8	Acenaphthylene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	67-64-1	Acetone	9.1	J	18	ug/kg
R5AU1S		11/08/2002	Field Sample	309-00-2	Aldrin	2.4	U	2.4	ug/kg
R5AU1S		11/08/2002	Field Sample	319-84-6	alpha-BHC	2.4	U	2.4	ug/kg
R5AU1S		11/08/2002	Field Sample	5103-71-9	alpha-Chlordane	2.4	U	2.4	ug/kg
R5AU1S		11/08/2002	Field Sample	7429-90-5	Aluminum	2900		0.02	mg/kg
R5AU1S		11/08/2002	Field Sample	120-12-7	Anthracene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	7440-36-0	Antimony	2.5	U	2.5	mg/kg
R5AU1S		11/08/2002	Field Sample	7440-38-2	Arsenic	2.6		0.01	mg/kg
R5AU1S		11/08/2002	Field Sample	7440-39-3	Barium	63		0.94	mg/kg
R5AU1S		11/08/2002	Field Sample	71-43-2	Benzene	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	56-55-3	Benzo(a)anthracene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	50-32-8	Benzo(a)pyrene	460	U	460	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5AU1S		11/08/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	7440-41-7	Beryllium	0.19	J	0.004	mg/kg
R5AU1S		11/08/2002	Field Sample	319-85-7	beta-BHC	2.4	U	2.4	ug/kg
R5AU1S		11/08/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	75-27-4	Bromodichloromethane	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	75-25-2	Bromoform	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	74-83-9	Bromomethane	14	U	14	ug/kg
R5AU1S		11/08/2002	Field Sample	7440-43-9	Cadmium	0.26	J	0.005	mg/kg
R5AU1S		11/08/2002	Field Sample	7440-70-2	Calcium	5800		1.1	mg/kg
R5AU1S		11/08/2002	Field Sample	86-74-8	Carbazole	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	75-15-0	Carbon Disulfide	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	56-23-5	Carbon Tetrachloride	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	108-90-7	Chlorobenzene	0.29	J	1	ug/kg
R5AU1S		11/08/2002	Field Sample	124-48-1	Chlorodibromomethane	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	75-00-3	Chloroethane	14	U	14	ug/kg
R5AU1S		11/08/2002	Field Sample	67-66-3	Chloroform	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	74-87-3	Chloromethane	14	U	14	ug/kg
R5AU1S		11/08/2002	Field Sample	7440-47-3	Chromium	6.3		0.01	mg/kg
R5AU1S		11/08/2002	Field Sample	218-01-9	Chrysene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	7440-48-4	Cobalt	3.7		0.01	mg/kg
R5AU1S		11/08/2002	Field Sample	7440-50-8	Copper	5.4		0.01	mg/kg
R5AU1S		11/08/2002	Field Sample	75-99-0	Dalapon	2800	U	2800	ug/kg
R5AU1S		11/08/2002	Field Sample	2051-24-3	Decachlorobiphenyl	24	U	24	ug/kg
R5AU1S		11/08/2002	Field Sample	319-86-8	delta-BHC	2.4	U	2.4	ug/kg
R5AU1S		11/08/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	132-64-9	Dibenzofuran	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	1918-00-9	Dicamba	28	U	28	ug/kg
R5AU1S		11/08/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.6	U	4.6	ug/kg
R5AU1S		11/08/2002	Field Sample	75-09-2	Dichloromethane	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	120-36-5	Dichlorprop	140	U	140	ug/kg
R5AU1S		11/08/2002	Field Sample	60-57-1	Dieldrin	4.6	U	4.6	ug/kg
R5AU1S		11/08/2002	Field Sample	84-66-2	Diethyl Phthalate	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	131-11-3	Dimethyl Phthalate	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	84-74-2	Di-n-butylphthalate	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	117-84-0	Di-n-octylphthalate	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	88-85-7	Dinoseb	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	959-98-8	Endosulfan I	2.4	U	2.4	ug/kg
R5AU1S		11/08/2002	Field Sample	33213-65-9	Endosulfan II	4.6	U	4.6	ug/kg
R5AU1S		11/08/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.6	U	4.6	ug/kg
R5AU1S		11/08/2002	Field Sample	72-20-8	Endrin	4.6	U	4.6	ug/kg
R5AU1S		11/08/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.6	U	4.6	ug/kg
R5AU1S		11/08/2002	Field Sample	53494-70-5	Endrin Ketone	4.6	U	4.6	ug/kg
R5AU1S		11/08/2002	Field Sample	100-41-4	Ethylbenzene	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	206-44-0	Fluoranthene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	86-73-7	Fluorene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.4	U	2.4	ug/kg
R5AU1S		11/08/2002	Field Sample	5103-74-2	gamma-Chlordane	2.4	U	2.4	ug/kg
R5AU1S		11/08/2002	Field Sample	76-44-8	Heptachlor	2.4	U	2.4	ug/kg
R5AU1S		11/08/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.4	U	2.4	ug/kg
R5AU1S		11/08/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	14	U	14	ug/kg
R5AU1S		11/08/2002	Field Sample	118-74-1	Hexachlorobenzene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	9.3	U	9.3	ug/kg
R5AU1S		11/08/2002	Field Sample	87-68-3	Hexachlorobutadiene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	67-72-1	Hexachloroethane	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	7439-89-6	Iron	7800		0.05	mg/kg
R5AU1S		11/08/2002	Field Sample	78-59-1	Isophorone	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	7439-92-1	Lead	18		0.005	mg/kg
R5AU1S		11/08/2002	Field Sample	7439-95-4	Magnesium	2100		47	mg/kg
R5AU1S		11/08/2002	Field Sample	7439-96-5	Manganese	250		0.01	mg/kg
R5AU1S		11/08/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2800	U	2800	ug/kg
R5AU1S		11/08/2002	Field Sample	93-65-2	MCPP	2800	U	2800	ug/kg
R5AU1S		11/08/2002	Field Sample	7439-97-6	Mercury	0.028		0.017	mg/kg
R5AU1S		11/08/2002	Field Sample	72-43-5	Methoxychlor	24	UJ	24	ug/kg
R5AU1S		11/08/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	35	U	35	ug/kg
R5AU1S		11/08/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	4.6	U	4.6	ug/kg
R5AU1S		11/08/2002	Field Sample	91-20-3	Naphthalene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	7440-02-0	Nickel	7.9		0.04	mg/kg
R5AU1S		11/08/2002	Field Sample	98-95-3	Nitrobenzene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	24	U	24	ug/kg
R5AU1S		11/08/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	14	U	14	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5AU1S		11/08/2002	Field Sample	106-47-8	P-Chloroaniline	920	U	920	ug/kg
R5AU1S		11/08/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	9.3	U	9.3	ug/kg
R5AU1S		11/08/2002	Field Sample	87-86-5	Pentachlorophenol	24	U	24	ug/kg
R5AU1S		11/08/2002	Field Sample	PH	pH	7.5		1	units
R5AU1S		11/08/2002	Field Sample	85-01-8	Phenanthrene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	108-95-2	Phenol	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	100-01-6	P-Nitroaniline	2400	U	2400	ug/kg
R5AU1S		11/08/2002	Field Sample	7440-09-7	Potassium	430		94	mg/kg
R5AU1S		11/08/2002	Field Sample	129-00-0	Pyrene	460	U	460	ug/kg
R5AU1S		11/08/2002	Field Sample	7782-49-2	Selenium	1.3	U	1.3	mg/kg
R5AU1S		11/08/2002	Field Sample	7440-22-4	Silver	1.3	U	1.3	mg/kg
R5AU1S		11/08/2002	Field Sample	7440-23-5	Sodium	64		100	mg/kg
R5AU1S		11/08/2002	Field Sample	100-42-5	Styrene (Monomer)	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	9.3	U	9.3	ug/kg
R5AU1S		11/08/2002	Field Sample	127-18-4	Tetrachloroethene	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	7440-28-0	Thallium	1.3	UJ	1.3	mg/kg
R5AU1S		11/08/2002	Field Sample	108-88-3	Toluene	2.4	U	2.4	ug/kg
R5AU1S		11/08/2002	Field Sample	E-10195	Total Organic Carbon	4100		500	mg/kg
R5AU1S		11/08/2002	Field Sample	8001-35-2	Toxaphene	240	U	240	ug/kg
R5AU1S		11/08/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.6	U	4.6	ug/kg
R5AU1S		11/08/2002	Field Sample	79-01-6	Trichloroethylene	6.9	U	6.9	ug/kg
R5AU1S		11/08/2002	Field Sample	7440-62-2	Vanadium	8.5		0.01	mg/kg
R5AU1S		11/08/2002	Field Sample	75-01-4	Vinyl chloride	14	U	14	ug/kg
R5AU1S		11/08/2002	Field Sample	1330-20-7	Xylenes, Total	14	U	14	ug/kg
R5AU1S		11/08/2002	Field Sample	7440-66-6	Zinc	59		0.02	mg/kg
R5BU1S		11/09/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	93-76-5	2,4,5-T	12	U	12	ug/kg
R5BU1S		11/09/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	12	U	12	ug/kg
R5BU1S		11/09/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	94-75-7	2,4-D	12	U	12	ug/kg
R5BU1S		11/09/2002	Field Sample	94-82-6	2,4-DB	12	U	12	ug/kg
R5BU1S		11/09/2002	Field Sample	120-83-2	2,4-Dichlorophenol	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	105-67-9	2,4-Dimethylphenol	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
R5BU1S		11/09/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	78-93-3	2-Butanone (MEK)	12	U	12	ug/kg
R5BU1S		11/09/2002	Field Sample	91-58-7	2-Chloronaphthalene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	95-57-8	2-Chlorophenol	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	91-57-6	2-Methylnaphthalene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
R5BU1S		11/09/2002	Field Sample	88-75-5	2-Nitrophenol	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	970	U	970	ug/kg
R5BU1S		11/09/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
R5BU1S		11/09/2002	Field Sample	72-54-8	4,4'-DDD	4.8	UJ	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	72-55-9	4,4'-DDE	0.6	J	0.1	ug/kg
R5BU1S		11/09/2002	Field Sample	50-29-3	4,4'-DDT	4.8	UJ	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
R5BU1S		11/09/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	12	ug/kg
R5BU1S		11/09/2002	Field Sample	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
R5BU1S		11/09/2002	Field Sample	83-32-9	Acenaphthene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	208-96-8	Acenaphthylene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	67-64-1	Acetone	7.8	J	18	ug/kg
R5BU1S		11/09/2002	Field Sample	309-00-2	Aldrin	2.5	U	2.5	ug/kg
R5BU1S		11/09/2002	Field Sample	319-84-6	alpha-BHC	2.5	U	2.5	ug/kg
R5BU1S		11/09/2002	Field Sample	5103-71-9	alpha-Chlordane	2.5	U	2.5	ug/kg
R5BU1S		11/09/2002	Field Sample	7429-90-5	Aluminum	2600		0.02	mg/kg
R5BU1S		11/09/2002	Field Sample	120-12-7	Anthracene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	7440-36-0	Antimony	2.5	U	2.5	mg/kg
R5BU1S		11/09/2002	Field Sample	7440-38-2	Arsenic	3.1		0.01	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5BU1S		11/09/2002	Field Sample	7440-39-3	Barium	63		0.94	mg/kg
R5BU1S		11/09/2002	Field Sample	71-43-2	Benzene	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	56-55-3	Benzo(a)anthracene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	50-32-8	Benzo(a)pyrene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	7440-41-7	Beryllium	0.16	J	0.004	mg/kg
R5BU1S		11/09/2002	Field Sample	319-85-7	beta-BHC	2.5	U	2.5	ug/kg
R5BU1S		11/09/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	75-27-4	Bromodichloromethane	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	75-25-2	Bromoform	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	74-83-9	Bromomethane	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	7440-43-9	Cadmium	0.3	J	0.005	mg/kg
R5BU1S		11/09/2002	Field Sample	7440-70-2	Calcium	5500		1.1	mg/kg
R5BU1S		11/09/2002	Field Sample	86-74-8	Carbazole	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	75-15-0	Carbon Disulfide	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	108-90-7	Chlorobenzene	0.2	J	1	ug/kg
R5BU1S		11/09/2002	Field Sample	124-48-1	Chlorodibromomethane	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	75-00-3	Chloroethane	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	67-66-3	Chloroform	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	74-87-3	Chloromethane	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	7440-47-3	Chromium	5.5		0.01	mg/kg
R5BU1S		11/09/2002	Field Sample	218-01-9	Chrysene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	7440-48-4	Cobalt	3.5		0.01	mg/kg
R5BU1S		11/09/2002	Field Sample	7440-50-8	Copper	4.7		0.01	mg/kg
R5BU1S		11/09/2002	Field Sample	75-99-0	Dalapon	2900	U	2900	ug/kg
R5BU1S		11/09/2002	Field Sample	2051-24-3	Decachlorobiphenyl	25	U	25	ug/kg
R5BU1S		11/09/2002	Field Sample	319-86-8	delta-BHC	2.5	U	2.5	ug/kg
R5BU1S		11/09/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	132-64-9	Dibenzofuran	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	1918-00-9	Dicamba	29	U	29	ug/kg
R5BU1S		11/09/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	75-09-2	Dichloromethane	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	120-36-5	Dichlorprop	150	U	150	ug/kg
R5BU1S		11/09/2002	Field Sample	60-57-1	Dieldrin	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	84-66-2	Diethyl Phthalate	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	131-11-3	Dimethyl Phthalate	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	84-74-2	Di-n-butylphthalate	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	117-84-0	Di-n-octylphthalate	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	88-85-7	Dinoseb	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	959-98-8	Endosulfan I	2.5	U	2.5	ug/kg
R5BU1S		11/09/2002	Field Sample	33213-65-9	Endosulfan II	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	72-20-8	Endrin	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	53494-70-5	Endrin Ketone	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	100-41-4	Ethylbenzene	0.83		0.83	ug/kg
R5BU1S		11/09/2002	Field Sample	206-44-0	Fluoranthene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	86-73-7	Fluorene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.5	U	2.5	ug/kg
R5BU1S		11/09/2002	Field Sample	5103-74-2	gamma-Chlordane	2.5	U	2.5	ug/kg
R5BU1S		11/09/2002	Field Sample	76-44-8	Heptachlor	2.5	U	2.5	ug/kg
R5BU1S		11/09/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.5	U	2.5	ug/kg
R5BU1S		11/09/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	15	U	15	ug/kg
R5BU1S		11/09/2002	Field Sample	118-74-1	Hexachlorobenzene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	9.8	U	9.8	ug/kg
R5BU1S		11/09/2002	Field Sample	87-68-3	Hexachlorobutadiene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	67-72-1	Hexachloroethane	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	7439-89-6	Iron	7000		0.05	mg/kg
R5BU1S		11/09/2002	Field Sample	78-59-1	Isophorone	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	7439-92-1	Lead	13		0.005	mg/kg
R5BU1S		11/09/2002	Field Sample	7439-95-4	Magnesium	2100		47	mg/kg
R5BU1S		11/09/2002	Field Sample	7439-96-5	Manganese	180		0.01	mg/kg
R5BU1S		11/09/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2900	U	2900	ug/kg
R5BU1S		11/09/2002	Field Sample	93-65-2	MCPP	2900	U	2900	ug/kg
R5BU1S		11/09/2002	Field Sample	7439-97-6	Mercury	0.01	J	0.017	mg/kg
R5BU1S		11/09/2002	Field Sample	72-43-5	Methoxychlor	25	UJ	25	ug/kg
R5BU1S		11/09/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	12	U	12	ug/kg
R5BU1S		11/09/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	91-20-3	Naphthalene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	7440-02-0	Nickel	7.8		0.04	mg/kg
R5BU1S		11/09/2002	Field Sample	98-95-3	Nitrobenzene	480	U	480	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5BU1S		11/09/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	25	U	25	ug/kg
R5BU1S		11/09/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	15	U	15	ug/kg
R5BU1S		11/09/2002	Field Sample	106-47-8	P-Chloroaniline	970	U	970	ug/kg
R5BU1S		11/09/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	9.8	U	9.8	ug/kg
R5BU1S		11/09/2002	Field Sample	87-86-5	Pentachlorophenol	25	U	25	ug/kg
R5BU1S		11/09/2002	Field Sample	PH	pH	7.1		1	units
R5BU1S		11/09/2002	Field Sample	85-01-8	Phenanthrene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	108-95-2	Phenol	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	100-01-6	P-Nitroaniline	2500	U	2500	ug/kg
R5BU1S		11/09/2002	Field Sample	7440-09-7	Potassium	390		94	mg/kg
R5BU1S		11/09/2002	Field Sample	129-00-0	Pyrene	480	U	480	ug/kg
R5BU1S		11/09/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R5BU1S		11/09/2002	Field Sample	7440-22-4	Silver	1.2	U	1.2	mg/kg
R5BU1S		11/09/2002	Field Sample	7440-23-5	Sodium	67		100	mg/kg
R5BU1S		11/09/2002	Field Sample	100-42-5	Styrene (Monomer)	0.19	J	1	ug/kg
R5BU1S		11/09/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	9.8	U	9.8	ug/kg
R5BU1S		11/09/2002	Field Sample	127-18-4	Tetrachloroethene	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	7440-28-0	Thallium	1.2	UJ	1.2	mg/kg
R5BU1S		11/09/2002	Field Sample	108-88-3	Toluene	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	E-10195	Total Organic Carbon	11000		500	mg/kg
R5BU1S		11/09/2002	Field Sample	8001-35-2	Toxaphene	250	U	250	ug/kg
R5BU1S		11/09/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	79-01-6	Trichloroethylene	2.4	U	2.4	ug/kg
R5BU1S		11/09/2002	Field Sample	7440-62-2	Vanadium	8.5		0.01	mg/kg
R5BU1S		11/09/2002	Field Sample	75-01-4	Vinyl chloride	4.8	U	4.8	ug/kg
R5BU1S		11/09/2002	Field Sample	1330-20-7	Xylenes, Total	5		11	ug/kg
R5BU1S		11/09/2002	Field Sample	7440-66-6	Zinc	86		0.02	mg/kg
R5AM1S		11/08/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	5.8	U	5.8	ug/kg
R5AM1S		11/08/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	93-76-5	2,4,5-T	11	U	11	ug/kg
R5AM1S		11/08/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	11	U	11	ug/kg
R5AM1S		11/08/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	94-75-7	2,4-D	20		0.5	ug/kg
R5AM1S		11/08/2002	Field Sample	94-82-6	2,4-DB	11	U	11	ug/kg
R5AM1S		11/08/2002	Field Sample	120-83-2	2,4-Dichlorophenol	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	105-67-9	2,4-Dimethylphenol	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2200	U	2200	ug/kg
R5AM1S		11/08/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	78-93-3	2-Butanone (MEK)	14	U	14	ug/kg
R5AM1S		11/08/2002	Field Sample	91-58-7	2-Chloronaphthalene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	95-57-8	2-Chlorophenol	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	91-57-6	2-Methylnaphthalene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	88-74-4	2-Nitroaniline	2200	U	2200	ug/kg
R5AM1S		11/08/2002	Field Sample	88-75-5	2-Nitrophenol	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	860	U	860	ug/kg
R5AM1S		11/08/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	99-09-2	3-Nitroaniline	2200	U	2200	ug/kg
R5AM1S		11/08/2002	Field Sample	72-54-8	4,4'-DDD	4.3	UJ	4.3	ug/kg
R5AM1S		11/08/2002	Field Sample	72-55-9	4,4'-DDE	4.3	U	4.3	ug/kg
R5AM1S		11/08/2002	Field Sample	50-29-3	4,4'-DDT	4.3	UJ	4.3	ug/kg
R5AM1S		11/08/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2200	U	2200	ug/kg
R5AM1S		11/08/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	14	U	14	ug/kg
R5AM1S		11/08/2002	Field Sample	100-02-7	4-Nitrophenol	2200	U	2200	ug/kg
R5AM1S		11/08/2002	Field Sample	83-32-9	Acenaphthene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	208-96-8	Acenaphthylene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	67-64-1	Acetone	4.1	J	18	ug/kg
R5AM1S		11/08/2002	Field Sample	309-00-2	Aldrin	2.2	U	2.2	ug/kg
R5AM1S		11/08/2002	Field Sample	319-84-6	alpha-BHC	2.2	U	2.2	ug/kg
R5AM1S		11/08/2002	Field Sample	5103-71-9	alpha-Chlordane	2.2	U	2.2	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5AM1S		11/08/2002	Field Sample	7429-90-5	Aluminum	2600		0.02	mg/kg
R5AM1S		11/08/2002	Field Sample	120-12-7	Anthracene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	7440-36-0	Antimony	2.4	U	2.4	mg/kg
R5AM1S		11/08/2002	Field Sample	7440-38-2	Arsenic	2.7		0.01	mg/kg
R5AM1S		11/08/2002	Field Sample	7440-39-3	Barium	59		0.94	mg/kg
R5AM1S		11/08/2002	Field Sample	71-43-2	Benzene	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	56-55-3	Benzo(a)anthracene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	50-32-8	Benzo(a)pyrene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	7440-41-7	Beryllium	0.18	J	0.004	mg/kg
R5AM1S		11/08/2002	Field Sample	319-85-7	beta-BHC	2.2	U	2.2	ug/kg
R5AM1S		11/08/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	75-27-4	Bromodichloromethane	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	75-25-2	Bromoform	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	74-83-9	Bromomethane	5.8	U	5.8	ug/kg
R5AM1S		11/08/2002	Field Sample	7440-43-9	Cadmium	0.31	J	0.005	mg/kg
R5AM1S		11/08/2002	Field Sample	7440-70-2	Calcium	6600		1.1	mg/kg
R5AM1S		11/08/2002	Field Sample	86-74-8	Carbazole	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	75-15-0	Carbon Disulfide	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	108-90-7	Chlorobenzene	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	124-48-1	Chlorodibromomethane	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	75-00-3	Chloroethane	5.8	U	5.8	ug/kg
R5AM1S		11/08/2002	Field Sample	67-66-3	Chloroform	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	74-87-3	Chloromethane	5.8	U	5.8	ug/kg
R5AM1S		11/08/2002	Field Sample	7440-47-3	Chromium	5.8		0.01	mg/kg
R5AM1S		11/08/2002	Field Sample	218-01-9	Chrysene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	7440-48-4	Cobalt	3.9		0.01	mg/kg
R5AM1S		11/08/2002	Field Sample	7440-50-8	Copper	4.5		0.01	mg/kg
R5AM1S		11/08/2002	Field Sample	75-99-0	Dalapon	2600	U	2600	ug/kg
R5AM1S		11/08/2002	Field Sample	2051-24-3	Decachlorobiphenyl	22	U	22	ug/kg
R5AM1S		11/08/2002	Field Sample	319-86-8	delta-BHC	2.2	U	2.2	ug/kg
R5AM1S		11/08/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	132-64-9	Dibenzofuran	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	1918-00-9	Dicamba	26	U	26	ug/kg
R5AM1S		11/08/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.3	U	4.3	ug/kg
R5AM1S		11/08/2002	Field Sample	75-09-2	Dichloromethane	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	120-36-5	Dichlorprop	130	U	130	ug/kg
R5AM1S		11/08/2002	Field Sample	60-57-1	Dieldrin	4.3	U	4.3	ug/kg
R5AM1S		11/08/2002	Field Sample	84-66-2	Diethyl Phthalate	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	131-11-3	Dimethyl Phthalate	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	84-74-2	Di-n-butylphthalate	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	117-84-0	Di-n-octylphthalate	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	88-85-7	Dinoseb	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	959-98-8	Endosulfan I	2.2	U	2.2	ug/kg
R5AM1S		11/08/2002	Field Sample	33213-65-9	Endosulfan II	4.3	U	4.3	ug/kg
R5AM1S		11/08/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.3	U	4.3	ug/kg
R5AM1S		11/08/2002	Field Sample	72-20-8	Endrin	4.3	U	4.3	ug/kg
R5AM1S		11/08/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.3	U	4.3	ug/kg
R5AM1S		11/08/2002	Field Sample	53494-70-5	Endrin Ketone	4.3	U	4.3	ug/kg
R5AM1S		11/08/2002	Field Sample	100-41-4	Ethylbenzene	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	206-44-0	Fluoranthene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	86-73-7	Fluorene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.2	U	2.2	ug/kg
R5AM1S		11/08/2002	Field Sample	5103-74-2	gamma-Chlordane	2.2	U	2.2	ug/kg
R5AM1S		11/08/2002	Field Sample	76-44-8	Heptachlor	2.2	U	2.2	ug/kg
R5AM1S		11/08/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.2	U	2.2	ug/kg
R5AM1S		11/08/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	13	U	13	ug/kg
R5AM1S		11/08/2002	Field Sample	118-74-1	Hexachlorobenzene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.7	U	8.7	ug/kg
R5AM1S		11/08/2002	Field Sample	87-68-3	Hexachlorobutadiene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	67-72-1	Hexachloroethane	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	7439-89-6	Iron	7500		0.05	mg/kg
R5AM1S		11/08/2002	Field Sample	78-59-1	Isophorone	390	J	10	ug/kg
R5AM1S		11/08/2002	Field Sample	7439-92-1	Lead	14		0.005	mg/kg
R5AM1S		11/08/2002	Field Sample	7439-95-4	Magnesium	2300		47	mg/kg
R5AM1S		11/08/2002	Field Sample	7439-96-5	Manganese	190		0.01	mg/kg
R5AM1S		11/08/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2600	U	2600	ug/kg
R5AM1S		11/08/2002	Field Sample	93-65-2	MCPP	2600	U	2600	ug/kg
R5AM1S		11/08/2002	Field Sample	7439-97-6	Mercury	0.0038	J	0.017	mg/kg
R5AM1S		11/08/2002	Field Sample	72-43-5	Methoxychlor	22	UJ	22	ug/kg
R5AM1S		11/08/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	14	U	14	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5AM1S		11/08/2002	Field Sample	C-MONOCHLOR	Monochlorobiphenyl	4.3	U	4.3	ug/kg
R5AM1S		11/08/2002	Field Sample	91-20-3	Naphthalene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	7440-02-0	Nickel	8.5		0.04	mg/kg
R5AM1S		11/08/2002	Field Sample	98-95-3	Nitrobenzene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	C-NONACHLOR	Nonachlorobiphenyl	22	U	22	ug/kg
R5AM1S		11/08/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	13	U	13	ug/kg
R5AM1S		11/08/2002	Field Sample	106-47-8	P-Chloroaniline	860	U	860	ug/kg
R5AM1S		11/08/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.7	U	8.7	ug/kg
R5AM1S		11/08/2002	Field Sample	87-86-5	Pentachlorophenol	22	U	22	ug/kg
R5AM1S		11/08/2002	Field Sample	PH	pH	7.9		1	units
R5AM1S		11/08/2002	Field Sample	85-01-8	Phenanthrene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	108-95-2	Phenol	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	100-01-6	P-Nitroaniline	2200	U	2200	ug/kg
R5AM1S		11/08/2002	Field Sample	7440-09-7	Potassium	410		94	mg/kg
R5AM1S		11/08/2002	Field Sample	129-00-0	Pyrene	430	U	430	ug/kg
R5AM1S		11/08/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R5AM1S		11/08/2002	Field Sample	7440-22-4	Silver	1.2	U	1.2	mg/kg
R5AM1S		11/08/2002	Field Sample	7440-23-5	Sodium	69		100	mg/kg
R5AM1S		11/08/2002	Field Sample	100-42-5	Styrene (Monomer)	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.7	U	8.7	ug/kg
R5AM1S		11/08/2002	Field Sample	127-18-4	Tetrachloroethene	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	7440-28-0	Thallium	1.2	UJ	1.2	mg/kg
R5AM1S		11/08/2002	Field Sample	108-88-3	Toluene	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	E-10195	Total Organic Carbon	1000		500	mg/kg
R5AM1S		11/08/2002	Field Sample	8001-35-2	Toxaphene	220	U	220	ug/kg
R5AM1S		11/08/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.3	U	4.3	ug/kg
R5AM1S		11/08/2002	Field Sample	79-01-6	Trichloroethylene	2.9	U	2.9	ug/kg
R5AM1S		11/08/2002	Field Sample	7440-62-2	Vanadium	8.4		0.01	mg/kg
R5AM1S		11/08/2002	Field Sample	75-01-4	Vinyl chloride	5.8	U	5.8	ug/kg
R5AM1S		11/08/2002	Field Sample	1330-20-7	Xylenes, Total	5.8	U	5.8	ug/kg
R5AM1S		11/08/2002	Field Sample	7440-66-6	Zinc	70		0.02	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	75-34-3	1,1-Dichloroethane	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	75-35-4	1,1-Dichloroethylene	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	120-82-1	1,2,4-Trichlorobenzene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	95-50-1	1,2-Dichlorobenzene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	107-06-2	1,2-Dichloroethane	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	540-59-0	1,2-Dichloroethene (total)	5	U	5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	78-87-5	1,2-Dichloropropane	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	541-73-1	1,3-Dichlorobenzene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	106-46-7	1,4-Dichlorobenzene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	93-76-5	2,4,5-T	11	U	11	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	93-72-1	2,4,5-TP (Silvex)	11	U	11	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	95-95-4	2,4,5-Trichlorophenol	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	88-06-2	2,4,6-Trichlorophenol	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	94-75-7	2,4-D	11	U	11	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	94-82-6	2,4-DB	11	U	11	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	120-83-2	2,4-Dichlorophenol	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	105-67-9	2,4-Dimethylphenol	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	51-28-5	2,4-Dinitrophenol	2200	U	2200	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	121-14-2	2,4-Dinitrotoluene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	606-20-2	2,6-Dinitrotoluene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	78-93-3	2-Butanone (MEK)	12	U	12	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	91-58-7	2-Chloronaphthalene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	95-57-8	2-Chlorophenol	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	91-57-6	2-Methylnaphthalene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	95-48-7	2-Methylphenol (o-Cresol)	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	88-74-4	2-Nitroaniline	2200	U	2200	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	88-75-5	2-Nitrophenol	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	91-94-1	3,3'-Dichlorobenzidine	870	U	870	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	99-09-2	3-Nitroaniline	2200	U	2200	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	72-54-8	4,4'-DDD	4.3	UJ	4.3	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	72-55-9	4,4'-DDE	4.3	U	4.3	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	50-29-3	4,4'-DDT	4.3	UJ	4.3	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	534-52-1	4,6-Dinitro-2-methylphenol	2200	U	2200	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	101-55-3	4-Bromophenyl Phenyl Ether	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	59-50-7	4-Chloro-3-methylphenol	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7005-72-3	4-Chlorophenyl Phenyl Ether	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	12	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	100-02-7	4-Nitrophenol	2200	U	2200	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	83-32-9	Acenaphthene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	208-96-8	Acenaphthylene	430	U	430	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	67-64-1	Acetone	3.1	J	18	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	309-00-2	Aldrin	2.2	U	2.2	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	319-84-6	alpha-BHC	2.2	U	2.2	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	5103-71-9	alpha-Chlordane	2.2	U	2.2	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7429-90-5	Aluminum	1800		0.02	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	120-12-7	Anthracene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-36-0	Antimony	2.4	U	2.4	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-38-2	Arsenic	1.7		0.01	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-39-3	Barium	50		0.94	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	71-43-2	Benzene	0.28	J	1	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	56-55-3	Benzo(a)anthracene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	50-32-8	Benzo(a)pyrene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	205-99-2	Benzo(b)fluoranthene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	191-24-2	Benzo(g,h,i)perylene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	207-08-9	Benzo(k)fluoranthene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	85-68-7	Benzyl Butyl Phthalate	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-41-7	Beryllium	0.11	J	0.004	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	319-85-7	beta-BHC	2.2	U	2.2	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	111-91-1	bis(2-Chloroethoxy)methane	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	111-44-4	bis(2-Chloroethyl)ether	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	117-81-7	bis(2-Ethylhexyl)phthalate	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	75-27-4	Bromodichloromethane	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	75-25-2	Bromoform	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	74-83-9	Bromomethane	5	U	5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-43-9	Cadmium	0.32	J	0.005	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-70-2	Calcium	5100		1.1	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	86-74-8	Carbazole	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	75-15-0	Carbon Disulfide	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	56-23-5	Carbon Tetrachloride	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	108-90-7	Chlorobenzene	0.56	J	1	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	124-48-1	Chlorodibromomethane	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	75-00-3	Chloroethane	5	U	5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	67-66-3	Chloroform	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	74-87-3	Chloromethane	5	U	5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-47-3	Chromium	4.2		0.01	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	218-01-9	Chrysene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-48-4	Cobalt	3		0.01	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-50-8	Copper	3.7		0.01	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	75-99-0	Dalapon	2600	U	2600	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	2051-24-3	Decachlorobiphenyl	22	U	22	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	319-86-8	delta-BHC	2.2	U	2.2	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	53-70-3	Dibenzo(a,h)anthracene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	132-64-9	Dibenzofuran	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	1918-00-9	Dicamba	26	U	26	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	C-DICHLOROBI	Dichlorobiphenyl	4.3	U	4.3	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	75-09-2	Dichloromethane	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	120-36-5	Dichlorprop	130	U	130	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	60-57-1	Dieldrin	4.3	U	4.3	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	84-66-2	Diethyl Phthalate	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	131-11-3	Dimethyl Phthalate	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	84-74-2	Di-n-butylphthalate	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	117-84-0	Di-n-octylphthalate	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	88-85-7	Dinoseb	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	959-98-8	Endosulfan I	2.2	U	2.2	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	33213-65-9	Endosulfan II	4.3	U	4.3	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	1031-07-8	Endosulfan Sulfate	4.3	U	4.3	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	72-20-8	Endrin	4.3	U	4.3	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7421-93-4	Endrin Aldehyde	4.3	U	4.3	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	53494-70-5	Endrin Ketone	1.3	J	0.1	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	100-41-4	Ethylbenzene	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	206-44-0	Fluoranthene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	86-73-7	Fluorene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	58-89-9	gamma-BHC (Lindane)	2.2	U	2.2	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	5103-74-2	gamma-Chlordane	2.2	U	2.2	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	76-44-8	Heptachlor	2.2	U	2.2	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	1024-57-3	Heptachlor Epoxide	2.2	U	2.2	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	C-HEPTACHLOR	Heptachlorobiphenyl	13	U	13	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	118-74-1	Hexachlorobenzene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	C-HEXACHLORO	Hexachlorobiphenyl	8.8	U	8.8	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	87-68-3	Hexachlorobutadiene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	77-47-4	Hexachlorocyclopentadiene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	67-72-1	Hexachloroethane	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	193-39-5	Indeno(1,2,3-cd)pyrene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7439-89-6	Iron	5300		0.05	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	78-59-1	Isophorone	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7439-92-1	Lead	10		0.005	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7439-95-4	Magnesium	2000		47	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7439-96-5	Manganese	100		0.01	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2600	U	2600	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	93-65-2	MCPP	2600	U	2600	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7439-97-6	Mercury	0.0084	J	0.017	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	72-43-5	Methoxychlor	22	UJ	22	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	591-78-6	Methyl N-Butyl Ketone	12	U	12	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	C-MONOCHLOR(	Monochlorobiphenyl	4.3	U	4.3	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	91-20-3	Naphthalene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-02-0	Nickel	6.4		0.04	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	98-95-3	Nitrobenzene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	621-64-7	N-Nitroso-di-n-propylamine	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	86-30-6	N-Nitrosodiphenylamine	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	C-NONACHLOR(	Nonachlorobiphenyl	22	U	22	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	C-OCTA-BIPHE	Octachlorobiphenyl	13	U	13	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	106-47-8	P-Chloroaniline	870	U	870	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	C-PENTBIPHEN	Pentachlorobiphenyl	8.8	U	8.8	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	87-86-5	Pentachlorophenol	22	U	22	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	PH	pH	7.9		1	units
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	85-01-8	Phenanthrene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	108-95-2	Phenol	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	100-01-6	P-Nitroaniline	2200	U	2200	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-09-7	Potassium	310		94	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	129-00-0	Pyrene	430	U	430	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-22-4	Silver	1.2	U	1.2	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-23-5	Sodium	56	J	100	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	100-42-5	Styrene (Monomer)	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	C-TETRACHLOR	Tetrachlorobiphenyl	8.8	U	8.8	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	127-18-4	Tetrachloroethene	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-28-0	Thallium	1.2	UJ	1.2	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	108-88-3	Toluene	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	E-10195	Total Organic Carbon	3200		500	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	8001-35-2	Toxaphene	220	U	220	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	10061-02-6	trans-1,3-Dichloropropene	2.5	U	2.5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	C-TRICHLOROB	Trichlorobiphenyl	4.3	U	4.3	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	79-01-6	Trichloroethylene	0.19	J	1	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-62-2	Vanadium	6.4		0.01	mg/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	75-01-4	Vinyl chloride	5	U	5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	1330-20-7	Xylenes, Total	5	U	5	ug/kg
R5AM3S	R5AM1S	11/08/2002	Field Duplicate	7440-66-6	Zinc	70		0.02	mg/kg
R5BM1S		11/09/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.002	U	0.002	ug/kg
R5BM1S		11/09/2002	Field Sample	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.0007	U	0.0007	ug/kg
R5BM1S		11/09/2002	Field Sample	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.00027	U	0.00027	ug/kg
R5BM1S		11/09/2002	Field Sample	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.00018	U	0.00018	ug/kg
R5BM1S		11/09/2002	Field Sample	70648-26-9	1,2,3,4,7,8-HxCDF	0.00039	U	0.00039	ug/kg
R5BM1S		11/09/2002	Field Sample	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.00026	U	0.00026	ug/kg
R5BM1S		11/09/2002	Field Sample	57117-44-9	1,2,3,6,7,8-HxCDF	0.00026	U	0.00026	ug/kg
R5BM1S		11/09/2002	Field Sample	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.00021	U	0.00021	ug/kg
R5BM1S		11/09/2002	Field Sample	72918-21-9	1,2,3,7,8,9-HxCDF	0.00013	U	0.00013	ug/kg
R5BM1S		11/09/2002	Field Sample	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	0.00018	U	0.00018	ug/kg
R5BM1S		11/09/2002	Field Sample	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.00023	U	0.00023	ug/kg
R5BM1S		11/09/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	5.4	U	5.4	ug/kg
R5BM1S		11/09/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	60851-34-5	2,3,4,6,7,8-HxCDF	0.00019	U	0.00019	ug/kg
R5BM1S		11/09/2002	Field Sample	57117-31-4	2,3,4,7,8-PeCDF	0.00018	U	0.00018	ug/kg
R5BM1S		11/09/2002	Field Sample	1746-01-6	2,3,7,8-TCDD	0.0001	U	0.0001	ug/kg
R5BM1S		11/09/2002	Field Sample	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	0.00025	U	0.00025	ug/kg
R5BM1S		11/09/2002	Field Sample	93-76-5	2,4,5-T	11	U	11	ug/kg
R5BM1S		11/09/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	11	U	11	ug/kg
R5BM1S		11/09/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	94-75-7	2,4-D	11	U	11	ug/kg
R5BM1S		11/09/2002	Field Sample	94-82-6	2,4-DB	11	U	11	ug/kg
R5BM1S		11/09/2002	Field Sample	120-83-2	2,4-Dichlorophenol	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	105-67-9	2,4-Dimethylphenol	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2200	U	2200	ug/kg
R5BM1S		11/09/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	78-93-3	2-Butanone (MEK)	14	U	14	ug/kg
R5BM1S		11/09/2002	Field Sample	91-58-7	2-Chloronaphthalene	430	U	430	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5BM1S		11/09/2002	Field Sample	95-57-8	2-Chlorophenol	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	91-57-6	2-Methylnaphthalene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	88-74-4	2-Nitroaniline	2200	U	2200	ug/kg
R5BM1S		11/09/2002	Field Sample	88-75-5	2-Nitrophenol	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	860	U	860	ug/kg
R5BM1S		11/09/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	99-09-2	3-Nitroaniline	2200	U	2200	ug/kg
R5BM1S		11/09/2002	Field Sample	72-54-8	4,4'-DDD	4.3	UJ	4.3	ug/kg
R5BM1S		11/09/2002	Field Sample	72-55-9	4,4'-DDE	4.3	U	4.3	ug/kg
R5BM1S		11/09/2002	Field Sample	50-29-3	4,4'-DDT	4.3	UJ	4.3	ug/kg
R5BM1S		11/09/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2200	U	2200	ug/kg
R5BM1S		11/09/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	14	U	14	ug/kg
R5BM1S		11/09/2002	Field Sample	100-02-7	4-Nitrophenol	2200	U	2200	ug/kg
R5BM1S		11/09/2002	Field Sample	83-32-9	Acenaphthene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	208-96-8	Acenaphthylene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	67-64-1	Acetone	17	J	18	ug/kg
R5BM1S		11/09/2002	Field Sample	309-00-2	Aldrin	2.2	U	2.2	ug/kg
R5BM1S		11/09/2002	Field Sample	319-84-6	alpha-BHC	2.2	U	2.2	ug/kg
R5BM1S		11/09/2002	Field Sample	5103-71-9	alpha-Chlordane	2.2	U	2.2	ug/kg
R5BM1S		11/09/2002	Field Sample	7429-90-5	Aluminum	1100		0.02	mg/kg
R5BM1S		11/09/2002	Field Sample	120-12-7	Anthracene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	7440-36-0	Antimony	2.4	U	2.4	mg/kg
R5BM1S		11/09/2002	Field Sample	7440-38-2	Arsenic	2.9		0.01	mg/kg
R5BM1S		11/09/2002	Field Sample	7440-39-3	Barium	43		0.94	mg/kg
R5BM1S		11/09/2002	Field Sample	71-43-2	Benzene	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	56-55-3	Benzo(a)anthracene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	50-32-8	Benzo(a)pyrene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	7440-41-7	Beryllium	0.081	J	0.004	mg/kg
R5BM1S		11/09/2002	Field Sample	319-85-7	beta-BHC	2.2	U	2.2	ug/kg
R5BM1S		11/09/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	75-27-4	Bromodichloromethane	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	75-25-2	Bromoform	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	74-83-9	Bromomethane	5.4	U	5.4	ug/kg
R5BM1S		11/09/2002	Field Sample	7440-43-9	Cadmium	0.65	U	0.65	mg/kg
R5BM1S		11/09/2002	Field Sample	7440-70-2	Calcium	2400		1.1	mg/kg
R5BM1S		11/09/2002	Field Sample	86-74-8	Carbazole	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	75-15-0	Carbon Disulfide	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	108-90-7	Chlorobenzene	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	124-48-1	Chlorodibromomethane	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	75-00-3	Chloroethane	5.4	U	5.4	ug/kg
R5BM1S		11/09/2002	Field Sample	67-66-3	Chloroform	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	74-87-3	Chloromethane	5.4	U	5.4	ug/kg
R5BM1S		11/09/2002	Field Sample	7440-47-3	Chromium	2.6		0.01	mg/kg
R5BM1S		11/09/2002	Field Sample	218-01-9	Chrysene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	7440-48-4	Cobalt	2.7		0.01	mg/kg
R5BM1S		11/09/2002	Field Sample	7440-50-8	Copper	2.7		0.01	mg/kg
R5BM1S		11/09/2002	Field Sample	75-99-0	Dalapon	2600	U	2600	ug/kg
R5BM1S		11/09/2002	Field Sample	2051-24-3	Decachlorobiphenyl	22	U	22	ug/kg
R5BM1S		11/09/2002	Field Sample	319-86-8	delta-BHC	2.2	U	2.2	ug/kg
R5BM1S		11/09/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	132-64-9	Dibenzofuran	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	1918-00-9	Dicamba	26	U	26	ug/kg
R5BM1S		11/09/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.3	U	4.3	ug/kg
R5BM1S		11/09/2002	Field Sample	75-09-2	Dichloromethane	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	120-36-5	Dichlorprop	130	U	130	ug/kg
R5BM1S		11/09/2002	Field Sample	60-57-1	Dieldrin	4.3	U	4.3	ug/kg
R5BM1S		11/09/2002	Field Sample	84-66-2	Diethyl Phthalate	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	131-11-3	Dimethyl Phthalate	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	84-74-2	Di-n-butylphthalate	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	117-84-0	Di-n-octylphthalate	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	88-85-7	Dinoseb	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	959-98-8	Endosulfan I	2.2	U	2.2	ug/kg
R5BM1S		11/09/2002	Field Sample	33213-65-9	Endosulfan II	4.3	U	4.3	ug/kg
R5BM1S		11/09/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.3	U	4.3	ug/kg
R5BM1S		11/09/2002	Field Sample	72-20-8	Endrin	4.3	U	4.3	ug/kg
R5BM1S		11/09/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.3	U	4.3	ug/kg
R5BM1S		11/09/2002	Field Sample	53494-70-5	Endrin Ketone	4.3	U	4.3	ug/kg
R5BM1S		11/09/2002	Field Sample	100-41-4	Ethylbenzene	0.71	J	0.83	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5BM1S		11/09/2002	Field Sample	206-44-0	Fluoranthene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	86-73-7	Fluorene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.2	U	2.2	ug/kg
R5BM1S		11/09/2002	Field Sample	5103-74-2	gamma-Chlordane	2.2	U	2.2	ug/kg
R5BM1S		11/09/2002	Field Sample	76-44-8	Heptachlor	2.2	U	2.2	ug/kg
R5BM1S		11/09/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.2	UJ	2.2	ug/kg
R5BM1S		11/09/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	13	U	13	ug/kg
R5BM1S		11/09/2002	Field Sample	118-74-1	Hexachlorobenzene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.7	U	8.7	ug/kg
R5BM1S		11/09/2002	Field Sample	87-68-3	Hexachlorobutadiene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	67-72-1	Hexachloroethane	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	7439-89-6	Iron	5100		0.05	mg/kg
R5BM1S		11/09/2002	Field Sample	78-59-1	Isophorone	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	7439-92-1	Lead	6.2		0.005	mg/kg
R5BM1S		11/09/2002	Field Sample	7439-95-4	Magnesium	1000		47	mg/kg
R5BM1S		11/09/2002	Field Sample	7439-96-5	Manganese	69		0.01	mg/kg
R5BM1S		11/09/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2600	U	2600	ug/kg
R5BM1S		11/09/2002	Field Sample	93-65-2	MCPP	2600	U	2600	ug/kg
R5BM1S		11/09/2002	Field Sample	7439-97-6	Mercury	0.016	J	0.017	mg/kg
R5BM1S		11/09/2002	Field Sample	72-43-5	Methoxychlor	22	UJ	22	ug/kg
R5BM1S		11/09/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	14	U	14	ug/kg
R5BM1S		11/09/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	4.3	U	4.3	ug/kg
R5BM1S		11/09/2002	Field Sample	91-20-3	Naphthalene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	7440-02-0	Nickel	6.1		0.04	mg/kg
R5BM1S		11/09/2002	Field Sample	98-95-3	Nitrobenzene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	22	U	22	ug/kg
R5BM1S		11/09/2002	Field Sample	3268-87-9	OCDD	0.047	J	0.000033	ug/kg
R5BM1S		11/09/2002	Field Sample	39001-02-0	OCDF	0.0016	U	0.0016	ug/kg
R5BM1S		11/09/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	13	U	13	ug/kg
R5BM1S		11/09/2002	Field Sample	106-47-8	P-Chloroaniline	860	U	860	ug/kg
R5BM1S		11/09/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.7	U	8.7	ug/kg
R5BM1S		11/09/2002	Field Sample	87-86-5	Pentachlorophenol	22	U	22	ug/kg
R5BM1S		11/09/2002	Field Sample	MOIST	Percent Moisture	23.1		1	%
R5BM1S		11/09/2002	Field Sample	PH	pH	7.4		1	units
R5BM1S		11/09/2002	Field Sample	85-01-8	Phenanthrene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	108-95-2	Phenol	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	100-01-6	P-Nitroaniline	2200	U	2200	ug/kg
R5BM1S		11/09/2002	Field Sample	7440-09-7	Potassium	240		94	mg/kg
R5BM1S		11/09/2002	Field Sample	129-00-0	Pyrene	430	U	430	ug/kg
R5BM1S		11/09/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R5BM1S		11/09/2002	Field Sample	7440-22-4	Silver	1.2	U	1.2	mg/kg
R5BM1S		11/09/2002	Field Sample	7440-23-5	Sodium	48	J	100	mg/kg
R5BM1S		11/09/2002	Field Sample	100-42-5	Styrene (Monomer)	0.17	J	1	ug/kg
R5BM1S		11/09/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.7	U	8.7	ug/kg
R5BM1S		11/09/2002	Field Sample	127-18-4	Tetrachloroethene	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	7440-28-0	Thallium	1.2	UJ	1.2	mg/kg
R5BM1S		11/09/2002	Field Sample	108-88-3	Toluene	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	37871-00-4	Total HpCDD	0.0021	U	0.0021	ug/kg
R5BM1S		11/09/2002	Field Sample	38998-75-3	Total HpCDF	0.0007	U	0.0007	ug/kg
R5BM1S		11/09/2002	Field Sample	34465-46-8	Total HxCDD	0.00048	U	0.00048	ug/kg
R5BM1S		11/09/2002	Field Sample	55684-94-1	Total HxCDF	0.00039	U	0.00039	ug/kg
R5BM1S		11/09/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R5BM1S		11/09/2002	Field Sample	36088-22-9	Total PeCDD	0.0004	U	0.0004	ug/kg
R5BM1S		11/09/2002	Field Sample	30402-15-4	Total PeCDF	0.00018	U	0.00018	ug/kg
R5BM1S		11/09/2002	Field Sample	41903-57-5	Total TCDD	0.00013	U	0.00013	ug/kg
R5BM1S		11/09/2002	Field Sample	55722-27-5	Total TCDF	0.00025	U	0.00025	ug/kg
R5BM1S		11/09/2002	Field Sample	8001-35-2	Toxaphene	220	U	220	ug/kg
R5BM1S		11/09/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.3	U	4.3	ug/kg
R5BM1S		11/09/2002	Field Sample	79-01-6	Trichloroethylene	2.7	U	2.7	ug/kg
R5BM1S		11/09/2002	Field Sample	7440-62-2	Vanadium	6.1		0.01	mg/kg
R5BM1S		11/09/2002	Field Sample	75-01-4	Vinyl chloride	5.4	U	5.4	ug/kg
R5BM1S		11/09/2002	Field Sample	1330-20-7	Xylenes, Total	4	J	11	ug/kg
R5BM1S		11/09/2002	Field Sample	7440-66-6	Zinc	22		0.02	mg/kg
R5CM1S		11/09/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	75-34-3	1,1-Dichloroethane	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	75-35-4	1,1-Dichloroethylene	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	107-06-2	1,2-Dichloroethane	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	5.1	U	5.1	ug/kg
R5CM1S		11/09/2002	Field Sample	78-87-5	1,2-Dichloropropane	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	380	U	380	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5CM1S		11/09/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	93-76-5	2,4,5-T	9.6	U	9.6	ug/kg
R5CM1S		11/09/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	9.6	U	9.6	ug/kg
R5CM1S		11/09/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	94-75-7	2,4-D	9.6	U	9.6	ug/kg
R5CM1S		11/09/2002	Field Sample	94-82-6	2,4-DB	9.6	U	9.6	ug/kg
R5CM1S		11/09/2002	Field Sample	120-83-2	2,4-Dichlorophenol	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	105-67-9	2,4-Dimethylphenol	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2000	U	2000	ug/kg
R5CM1S		11/09/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	78-93-3	2-Butanone (MEK)	13	U	13	ug/kg
R5CM1S		11/09/2002	Field Sample	91-58-7	2-Chloronaphthalene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	95-57-8	2-Chlorophenol	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	91-57-6	2-Methylnaphthalene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	88-74-4	2-Nitroaniline	2000	U	2000	ug/kg
R5CM1S		11/09/2002	Field Sample	88-75-5	2-Nitrophenol	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	770	U	770	ug/kg
R5CM1S		11/09/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	99-09-2	3-Nitroaniline	2000	U	2000	ug/kg
R5CM1S		11/09/2002	Field Sample	72-54-8	4,4'-DDD	3.8	UJ	3.8	ug/kg
R5CM1S		11/09/2002	Field Sample	72-55-9	4,4'-DDE	3.8	U	3.8	ug/kg
R5CM1S		11/09/2002	Field Sample	50-29-3	4,4'-DDT	3.8	UJ	3.8	ug/kg
R5CM1S		11/09/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2000	U	2000	ug/kg
R5CM1S		11/09/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	13	ug/kg
R5CM1S		11/09/2002	Field Sample	100-02-7	4-Nitrophenol	2000	U	2000	ug/kg
R5CM1S		11/09/2002	Field Sample	83-32-9	Acenaphthene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	208-96-8	Acenaphthylene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	67-64-1	Acetone	4.4	J	18	ug/kg
R5CM1S		11/09/2002	Field Sample	309-00-2	Aldrin	2	U	2	ug/kg
R5CM1S		11/09/2002	Field Sample	319-84-6	alpha-BHC	2	U	2	ug/kg
R5CM1S		11/09/2002	Field Sample	5103-71-9	alpha-Chlordane	2	U	2	ug/kg
R5CM1S		11/09/2002	Field Sample	7429-90-5	Aluminum	980		0.02	mg/kg
R5CM1S		11/09/2002	Field Sample	120-12-7	Anthracene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	7440-36-0	Antimony	2.1	U	2.1	mg/kg
R5CM1S		11/09/2002	Field Sample	7440-38-2	Arsenic	2.2		0.01	mg/kg
R5CM1S		11/09/2002	Field Sample	7440-39-3	Barium	28		0.94	mg/kg
R5CM1S		11/09/2002	Field Sample	71-43-2	Benzene	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	56-55-3	Benzo(a)anthracene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	50-32-8	Benzo(a)pyrene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	7440-41-7	Beryllium	0.063	J	0.004	mg/kg
R5CM1S		11/09/2002	Field Sample	319-85-7	beta-BHC	2	U	2	ug/kg
R5CM1S		11/09/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	75-27-4	Bromodichloromethane	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	75-25-2	Bromoform	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	74-83-9	Bromomethane	5.1	U	5.1	ug/kg
R5CM1S		11/09/2002	Field Sample	7440-43-9	Cadmium	0.58	U	0.58	mg/kg
R5CM1S		11/09/2002	Field Sample	7440-70-2	Calcium	1300		1.1	mg/kg
R5CM1S		11/09/2002	Field Sample	86-74-8	Carbazole	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	75-15-0	Carbon Disulfide	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	56-23-5	Carbon Tetrachloride	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	108-90-7	Chlorobenzene	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	124-48-1	Chlorodibromomethane	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	75-00-3	Chloroethane	5.1	U	5.1	ug/kg
R5CM1S		11/09/2002	Field Sample	67-66-3	Chloroform	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	74-87-3	Chloromethane	5.1	U	5.1	ug/kg
R5CM1S		11/09/2002	Field Sample	7440-47-3	Chromium	3.6		0.01	mg/kg
R5CM1S		11/09/2002	Field Sample	218-01-9	Chrysene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	7440-48-4	Cobalt	4.7		0.01	mg/kg
R5CM1S		11/09/2002	Field Sample	7440-50-8	Copper	2.1	U	2.1	mg/kg
R5CM1S		11/09/2002	Field Sample	75-99-0	Dalapon	2300	U	2300	ug/kg
R5CM1S		11/09/2002	Field Sample	2051-24-3	Decachlorobiphenyl	20	U	20	ug/kg
R5CM1S		11/09/2002	Field Sample	319-86-8	delta-BHC	2	U	2	ug/kg
R5CM1S		11/09/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	132-64-9	Dibenzofuran	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	1918-00-9	Dicamba	23	U	23	ug/kg
R5CM1S		11/09/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	3.8	U	3.8	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R5CM1S		11/09/2002	Field Sample	75-09-2	Dichloromethane	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/kg
R5CM1S		11/09/2002	Field Sample	60-57-1	Dieldrin	3.8	U	3.8	ug/kg
R5CM1S		11/09/2002	Field Sample	84-66-2	Diethyl Phthalate	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	131-11-3	Dimethyl Phthalate	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	84-74-2	Di-n-butylphthalate	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	117-84-0	Di-n-octylphthalate	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	88-85-7	Dinoseb	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	959-98-8	Endosulfan I	2	U	2	ug/kg
R5CM1S		11/09/2002	Field Sample	33213-65-9	Endosulfan II	3.8	U	3.8	ug/kg
R5CM1S		11/09/2002	Field Sample	1031-07-8	Endosulfan Sulfate	3.8	U	3.8	ug/kg
R5CM1S		11/09/2002	Field Sample	72-20-8	Endrin	3.8	U	3.8	ug/kg
R5CM1S		11/09/2002	Field Sample	7421-93-4	Endrin Aldehyde	3.8	U	3.8	ug/kg
R5CM1S		11/09/2002	Field Sample	53494-70-5	Endrin Ketone	3.8	U	3.8	ug/kg
R5CM1S		11/09/2002	Field Sample	100-41-4	Ethylbenzene	0.72	J	0.83	ug/kg
R5CM1S		11/09/2002	Field Sample	206-44-0	Fluoranthene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	86-73-7	Fluorene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2	U	2	ug/kg
R5CM1S		11/09/2002	Field Sample	5103-74-2	gamma-Chlordane	2	U	2	ug/kg
R5CM1S		11/09/2002	Field Sample	76-44-8	Heptachlor	2	U	2	ug/kg
R5CM1S		11/09/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2	U	2	ug/kg
R5CM1S		11/09/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg
R5CM1S		11/09/2002	Field Sample	118-74-1	Hexachlorobenzene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	7.8	U	7.8	ug/kg
R5CM1S		11/09/2002	Field Sample	87-68-3	Hexachlorobutadiene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	67-72-1	Hexachloroethane	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	7439-89-6	Iron	5400		0.05	mg/kg
R5CM1S		11/09/2002	Field Sample	78-59-1	Isophorone	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	7439-92-1	Lead	3.4		0.005	mg/kg
R5CM1S		11/09/2002	Field Sample	7439-95-4	Magnesium	950		47	mg/kg
R5CM1S		11/09/2002	Field Sample	7439-96-5	Manganese	190		0.01	mg/kg
R5CM1S		11/09/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	U	2300	ug/kg
R5CM1S		11/09/2002	Field Sample	93-65-2	MCPP	2300	U	2300	ug/kg
R5CM1S		11/09/2002	Field Sample	7439-97-6	Mercury	0.021	U	0.021	mg/kg
R5CM1S		11/09/2002	Field Sample	72-43-5	Methoxychlor	20	UJ	20	ug/kg
R5CM1S		11/09/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	13	U	13	ug/kg
R5CM1S		11/09/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	3.8	U	3.8	ug/kg
R5CM1S		11/09/2002	Field Sample	91-20-3	Naphthalene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	7440-02-0	Nickel	7.5		0.04	mg/kg
R5CM1S		11/09/2002	Field Sample	98-95-3	Nitrobenzene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	20	U	20	ug/kg
R5CM1S		11/09/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg
R5CM1S		11/09/2002	Field Sample	106-47-8	P-Chloroaniline	770	U	770	ug/kg
R5CM1S		11/09/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	7.8	U	7.8	ug/kg
R5CM1S		11/09/2002	Field Sample	87-86-5	Pentachlorophenol	2.6	J	1	ug/kg
R5CM1S		11/09/2002	Field Sample	PH	pH	6.9		1	units
R5CM1S		11/09/2002	Field Sample	85-01-8	Phenanthrene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	108-95-2	Phenol	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	100-01-6	P-Nitroaniline	2000	U	2000	ug/kg
R5CM1S		11/09/2002	Field Sample	7440-09-7	Potassium	130		94	mg/kg
R5CM1S		11/09/2002	Field Sample	129-00-0	Pyrene	380	U	380	ug/kg
R5CM1S		11/09/2002	Field Sample	7782-49-2	Selenium	1.1	U	1.1	mg/kg
R5CM1S		11/09/2002	Field Sample	7440-22-4	Silver	1.1	U	1.1	mg/kg
R5CM1S		11/09/2002	Field Sample	7440-23-5	Sodium	31	J	100	mg/kg
R5CM1S		11/09/2002	Field Sample	100-42-5	Styrene (Monomer)	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	7.8	U	7.8	ug/kg
R5CM1S		11/09/2002	Field Sample	127-18-4	Tetrachloroethene	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	7440-28-0	Thallium	1.1	UJ	1.1	mg/kg
R5CM1S		11/09/2002	Field Sample	108-88-3	Toluene	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R5CM1S		11/09/2002	Field Sample	8001-35-2	Toxaphene	200	U	200	ug/kg
R5CM1S		11/09/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	3.8	U	3.8	ug/kg
R5CM1S		11/09/2002	Field Sample	79-01-6	Trichloroethylene	2.5	U	2.5	ug/kg
R5CM1S		11/09/2002	Field Sample	7440-62-2	Vanadium	4		0.01	mg/kg
R5CM1S		11/09/2002	Field Sample	75-01-4	Vinyl chloride	5.1	U	5.1	ug/kg
R5CM1S		11/09/2002	Field Sample	1330-20-7	Xylenes, Total	4.2	J	11	ug/kg
R5CM1S		11/09/2002	Field Sample	7440-66-6	Zinc	13		0.02	mg/kg
R6AU1S		11/06/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	75-34-3	1,1-Dichloroethane	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	75-35-4	1,1-Dichloroethylene	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	107-06-2	1,2-Dichloroethane	6.8	U	6.8	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6AU1S		11/06/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	78-87-5	1,2-Dichloropropane	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	93-76-5	2,4,5-T	18	U	18	ug/kg
R6AU1S		11/06/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	18	U	18	ug/kg
R6AU1S		11/06/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	720	U	720	ug/kg
R6AU1S		11/06/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	720	U	720	ug/kg
R6AU1S		11/06/2002	Field Sample	94-75-7	2,4-D	18	U	18	ug/kg
R6AU1S		11/06/2002	Field Sample	94-82-6	2,4-DB	18	U	18	ug/kg
R6AU1S		11/06/2002	Field Sample	120-83-2	2,4-Dichlorophenol	720	U	720	ug/kg
R6AU1S		11/06/2002	Field Sample	105-67-9	2,4-Dimethylphenol	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	51-28-5	2,4-Dinitrophenol	3700	U	3700	ug/kg
R6AU1S		11/06/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	78-93-3	2-Butanone (MEK)	7.5	J	8.8	ug/kg
R6AU1S		11/06/2002	Field Sample	91-58-7	2-Chloronaphthalene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	95-57-8	2-Chlorophenol	720	U	720	ug/kg
R6AU1S		11/06/2002	Field Sample	91-57-6	2-Methylnaphthalene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	720	U	720	ug/kg
R6AU1S		11/06/2002	Field Sample	88-74-4	2-Nitroaniline	3700	UJ	3700	ug/kg
R6AU1S		11/06/2002	Field Sample	88-75-5	2-Nitrophenol	720	U	720	ug/kg
R6AU1S		11/06/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	1400	UJ	1400	ug/kg
R6AU1S		11/06/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	720	U	720	ug/kg
R6AU1S		11/06/2002	Field Sample	99-09-2	3-Nitroaniline	3700	UJ	3700	ug/kg
R6AU1S		11/06/2002	Field Sample	72-54-8	4,4'-DDD	7.2	U	7.2	ug/kg
R6AU1S		11/06/2002	Field Sample	72-55-9	4,4'-DDE	7.2	U	7.2	ug/kg
R6AU1S		11/06/2002	Field Sample	50-29-3	4,4'-DDT	7.2	UJ	7.2	ug/kg
R6AU1S		11/06/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	3700	U	3700	ug/kg
R6AU1S		11/06/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	720	U	720	ug/kg
R6AU1S		11/06/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	34	U	34	ug/kg
R6AU1S		11/06/2002	Field Sample	100-02-7	4-Nitrophenol	3700	U	3700	ug/kg
R6AU1S		11/06/2002	Field Sample	83-32-9	Acenaphthene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	208-96-8	Acenaphthylene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	67-64-1	Acetone	130	J	18	ug/kg
R6AU1S		11/06/2002	Field Sample	309-00-2	Aldrin	3.7	U	3.7	ug/kg
R6AU1S		11/06/2002	Field Sample	319-84-6	alpha-BHC	3.7	U	3.7	ug/kg
R6AU1S		11/06/2002	Field Sample	5103-71-9	alpha-Chlordane	3.7	U	3.7	ug/kg
R6AU1S		11/06/2002	Field Sample	7429-90-5	Aluminum	6700		0.02	mg/kg
R6AU1S		11/06/2002	Field Sample	120-12-7	Anthracene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	7440-36-0	Antimony	4	U	4	mg/kg
R6AU1S		11/06/2002	Field Sample	7440-38-2	Arsenic	4.8	J	0.01	mg/kg
R6AU1S		11/06/2002	Field Sample	7440-39-3	Barium	220		0.94	mg/kg
R6AU1S		11/06/2002	Field Sample	71-43-2	Benzene	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	56-55-3	Benzo(a)anthracene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	50-32-8	Benzo(a)pyrene	720	U	720	ug/kg
R6AU1S		11/06/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	720	U	720	ug/kg
R6AU1S		11/06/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	7440-41-7	Beryllium	0.45	J	0.004	mg/kg
R6AU1S		11/06/2002	Field Sample	319-85-7	beta-BHC	3.7	U	3.7	ug/kg
R6AU1S		11/06/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	75-27-4	Bromodichloromethane	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	75-25-2	Bromoform	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	74-83-9	Bromomethane	14	U	14	ug/kg
R6AU1S		11/06/2002	Field Sample	7440-43-9	Cadmium	0.95	J	0.005	mg/kg
R6AU1S		11/06/2002	Field Sample	7440-70-2	Calcium	13000		1.1	mg/kg
R6AU1S		11/06/2002	Field Sample	86-74-8	Carbazole	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	75-15-0	Carbon Disulfide	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	56-23-5	Carbon Tetrachloride	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	108-90-7	Chlorobenzene	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	124-48-1	Chlorodibromomethane	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	75-00-3	Chloroethane	14	U	14	ug/kg
R6AU1S		11/06/2002	Field Sample	67-66-3	Chloroform	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	74-87-3	Chloromethane	14	UJ	14	ug/kg
R6AU1S		11/06/2002	Field Sample	7440-47-3	Chromium	14		0.01	mg/kg
R6AU1S		11/06/2002	Field Sample	218-01-9	Chrysene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	7440-48-4	Cobalt	7.4	J	0.01	mg/kg
R6AU1S		11/06/2002	Field Sample	7440-50-8	Copper	11		0.01	mg/kg
R6AU1S		11/06/2002	Field Sample	75-99-0	Dalapon	4300	U	4300	ug/kg
R6AU1S		11/06/2002	Field Sample	2051-24-3	Decachlorobiphenyl	37	U	37	ug/kg
R6AU1S		11/06/2002	Field Sample	319-86-8	delta-BHC	3.7	U	3.7	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6AU1S		11/06/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	132-64-9	Dibenzofuran	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	1918-00-9	Dicamba	43	U	43	ug/kg
R6AU1S		11/06/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	7.2	U	7.2	ug/kg
R6AU1S		11/06/2002	Field Sample	75-09-2	Dichloromethane	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	120-36-5	Dichlorprop	220	U	220	ug/kg
R6AU1S		11/06/2002	Field Sample	60-57-1	Dieldrin	2.9	J	0.1	ug/kg
R6AU1S		11/06/2002	Field Sample	84-66-2	Diethyl Phthalate	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	131-11-3	Dimethyl Phthalate	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	84-74-2	Di-n-butylphthalate	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	117-84-0	Di-n-octylphthalate	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	88-85-7	Dinoseb	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	959-98-8	Endosulfan I	3.7	U	3.7	ug/kg
R6AU1S		11/06/2002	Field Sample	33213-65-9	Endosulfan II	7.2	U	7.2	ug/kg
R6AU1S		11/06/2002	Field Sample	1031-07-8	Endosulfan Sulfate	7.2	U	7.2	ug/kg
R6AU1S		11/06/2002	Field Sample	72-20-8	Endrin	7.2	U	7.2	ug/kg
R6AU1S		11/06/2002	Field Sample	7421-93-4	Endrin Aldehyde	7.2	U	7.2	ug/kg
R6AU1S		11/06/2002	Field Sample	53494-70-5	Endrin Ketone	7.2	U	7.2	ug/kg
R6AU1S		11/06/2002	Field Sample	100-41-4	Ethylbenzene	4.8	J	0.83	ug/kg
R6AU1S		11/06/2002	Field Sample	206-44-0	Fluoranthene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	86-73-7	Fluorene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	3.7	U	3.7	ug/kg
R6AU1S		11/06/2002	Field Sample	5103-74-2	gamma-Chlordane	3.7	U	3.7	ug/kg
R6AU1S		11/06/2002	Field Sample	76-44-8	Heptachlor	3.7	U	3.7	ug/kg
R6AU1S		11/06/2002	Field Sample	1024-57-3	Heptachlor Epoxide	3.7	U	3.7	ug/kg
R6AU1S		11/06/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	22	U	22	ug/kg
R6AU1S		11/06/2002	Field Sample	118-74-1	Hexachlorobenzene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	14	U	14	ug/kg
R6AU1S		11/06/2002	Field Sample	87-68-3	Hexachlorobutadiene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	67-72-1	Hexachloroethane	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	720	U	720	ug/kg
R6AU1S		11/06/2002	Field Sample	7439-89-6	Iron	15000		0.05	mg/kg
R6AU1S		11/06/2002	Field Sample	78-59-1	Isophorone	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	7439-92-1	Lead	39		0.005	mg/kg
R6AU1S		11/06/2002	Field Sample	7439-95-4	Magnesium	4600		47	mg/kg
R6AU1S		11/06/2002	Field Sample	7439-96-5	Manganese	700		0.01	mg/kg
R6AU1S		11/06/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	4300	U	4300	ug/kg
R6AU1S		11/06/2002	Field Sample	93-65-2	MCPP	4300	U	4300	ug/kg
R6AU1S		11/06/2002	Field Sample	7439-97-6	Mercury	0.051		0.017	mg/kg
R6AU1S		11/06/2002	Field Sample	72-43-5	Methoxychlor	37	UJ	37	ug/kg
R6AU1S		11/06/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	34	U	34	ug/kg
R6AU1S		11/06/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	7.2	U	7.2	ug/kg
R6AU1S		11/06/2002	Field Sample	91-20-3	Naphthalene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	7440-02-0	Nickel	16		0.04	mg/kg
R6AU1S		11/06/2002	Field Sample	98-95-3	Nitrobenzene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	37	U	37	ug/kg
R6AU1S		11/06/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	22	U	22	ug/kg
R6AU1S		11/06/2002	Field Sample	106-47-8	P-Chloroaniline	1400	UJ	1400	ug/kg
R6AU1S		11/06/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	14	U	14	ug/kg
R6AU1S		11/06/2002	Field Sample	87-86-5	Pentachlorophenol	37	U	37	ug/kg
R6AU1S		11/06/2002	Field Sample	PH	pH	7.2		1	units
R6AU1S		11/06/2002	Field Sample	85-01-8	Phenanthrene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	108-95-2	Phenol	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	100-01-6	P-Nitroaniline	3700	UJ	3700	ug/kg
R6AU1S		11/06/2002	Field Sample	7440-09-7	Potassium	920		94	mg/kg
R6AU1S		11/06/2002	Field Sample	129-00-0	Pyrene	720	UJ	720	ug/kg
R6AU1S		11/06/2002	Field Sample	7782-49-2	Selenium	2	U	2	mg/kg
R6AU1S		11/06/2002	Field Sample	7440-22-4	Silver	2	U	2	mg/kg
R6AU1S		11/06/2002	Field Sample	7440-23-5	Sodium	250	U	250	mg/kg
R6AU1S		11/06/2002	Field Sample	100-42-5	Styrene (Monomer)	8.4	J	1	ug/kg
R6AU1S		11/06/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	14	U	14	ug/kg
R6AU1S		11/06/2002	Field Sample	127-18-4	Tetrachloroethene	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	7440-28-0	Thallium	2	U	2	mg/kg
R6AU1S		11/06/2002	Field Sample	108-88-3	Toluene	4.6	J	1	ug/kg
R6AU1S		11/06/2002	Field Sample	E-10195	Total Organic Carbon	14000		500	mg/kg
R6AU1S		11/06/2002	Field Sample	8001-35-2	Toxaphene	370	U	370	ug/kg
R6AU1S		11/06/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	7.2	U	7.2	ug/kg
R6AU1S		11/06/2002	Field Sample	79-01-6	Trichloroethylene	6.8	U	6.8	ug/kg
R6AU1S		11/06/2002	Field Sample	7440-62-2	Vanadium	20		0.01	mg/kg
R6AU1S		11/06/2002	Field Sample	75-01-4	Vinyl chloride	14	U	14	ug/kg
R6AU1S		11/06/2002	Field Sample	1330-20-7	Xylenes, Total	24		11	ug/kg
R6AU1S		11/06/2002	Field Sample	7440-66-6	Zinc	210		0.02	mg/kg
R6BU1S		11/06/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	75-34-3	1,1-Dichloroethane	3.3	U	3.3	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6BU1S		11/06/2002	Field Sample	75-35-4	1,1-Dichloroethylene	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	107-06-2	1,2-Dichloroethane	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	78-87-5	1,2-Dichloropropane	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	93-76-5	2,4,5-T	12	U	12	ug/kg
R6BU1S		11/06/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	12	U	12	ug/kg
R6BU1S		11/06/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	94-75-7	2,4-D	12	U	12	ug/kg
R6BU1S		11/06/2002	Field Sample	94-82-6	2,4-DB	12	U	12	ug/kg
R6BU1S		11/06/2002	Field Sample	120-83-2	2,4-Dichlorophenol	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	105-67-9	2,4-Dimethylphenol	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2400	U	2400	ug/kg
R6BU1S		11/06/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	78-93-3	2-Butanone (MEK)	3.1	J	8.8	ug/kg
R6BU1S		11/06/2002	Field Sample	91-58-7	2-Chloronaphthalene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	95-57-8	2-Chlorophenol	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	91-57-6	2-Methylnaphthalene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	88-74-4	2-Nitroaniline	2400	U	2400	ug/kg
R6BU1S		11/06/2002	Field Sample	88-75-5	2-Nitrophenol	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	940	U	940	ug/kg
R6BU1S		11/06/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	99-09-2	3-Nitroaniline	2400	U	2400	ug/kg
R6BU1S		11/06/2002	Field Sample	72-54-8	4,4'-DDD	4.7	U	4.7	ug/kg
R6BU1S		11/06/2002	Field Sample	72-55-9	4,4'-DDE	1.1	J	0.1	ug/kg
R6BU1S		11/06/2002	Field Sample	50-29-3	4,4'-DDT	4.7	UJ	4.7	ug/kg
R6BU1S		11/06/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2400	U	2400	ug/kg
R6BU1S		11/06/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	17	U	17	ug/kg
R6BU1S		11/06/2002	Field Sample	100-02-7	4-Nitrophenol	2400	U	2400	ug/kg
R6BU1S		11/06/2002	Field Sample	83-32-9	Acenaphthene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	208-96-8	Acenaphthylene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	67-64-1	Acetone	20	J	18	ug/kg
R6BU1S		11/06/2002	Field Sample	309-00-2	Aldrin	2.4	U	2.4	ug/kg
R6BU1S		11/06/2002	Field Sample	319-84-6	alpha-BHC	2.4	U	2.4	ug/kg
R6BU1S		11/06/2002	Field Sample	5103-71-9	alpha-Chlordane	2.4	U	2.4	ug/kg
R6BU1S		11/06/2002	Field Sample	7429-90-5	Aluminum	3200		0.02	mg/kg
R6BU1S		11/06/2002	Field Sample	120-12-7	Anthracene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	7440-36-0	Antimony	2.6	U	2.6	mg/kg
R6BU1S		11/06/2002	Field Sample	7440-38-2	Arsenic	2.9	J	0.01	mg/kg
R6BU1S		11/06/2002	Field Sample	7440-39-3	Barium	110		0.94	mg/kg
R6BU1S		11/06/2002	Field Sample	71-43-2	Benzene	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	56-55-3	Benzo(a)anthracene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	50-32-8	Benzo(a)pyrene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	7440-41-7	Beryllium	0.23	J	0.004	mg/kg
R6BU1S		11/06/2002	Field Sample	319-85-7	beta-BHC	2.4	U	2.4	ug/kg
R6BU1S		11/06/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	75-27-4	Bromodichloromethane	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	75-25-2	Bromoform	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	74-83-9	Bromomethane	6.7	U	6.7	ug/kg
R6BU1S		11/06/2002	Field Sample	7440-43-9	Cadmium	0.51	J	0.005	mg/kg
R6BU1S		11/06/2002	Field Sample	7440-70-2	Calcium	8200		1.1	mg/kg
R6BU1S		11/06/2002	Field Sample	86-74-8	Carbazole	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	75-15-0	Carbon Disulfide	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	56-23-5	Carbon Tetrachloride	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	108-90-7	Chlorobenzene	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	124-48-1	Chlorodibromomethane	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	75-00-3	Chloroethane	6.7	U	6.7	ug/kg
R6BU1S		11/06/2002	Field Sample	67-66-3	Chloroform	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	74-87-3	Chloromethane	6.7	UJ	6.7	ug/kg
R6BU1S		11/06/2002	Field Sample	7440-47-3	Chromium	7.4		0.01	mg/kg
R6BU1S		11/06/2002	Field Sample	218-01-9	Chrysene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	7440-48-4	Cobalt	4.7	J	0.01	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6BU1S		11/06/2002	Field Sample	7440-50-8	Copper	7.6		0.01	mg/kg
R6BU1S		11/06/2002	Field Sample	75-99-0	Dalapon	2800	U	2800	ug/kg
R6BU1S		11/06/2002	Field Sample	2051-24-3	Decachlorobiphenyl	24	U	24	ug/kg
R6BU1S		11/06/2002	Field Sample	319-86-8	delta-BHC	2.4	U	2.4	ug/kg
R6BU1S		11/06/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	65	J	10	ug/kg
R6BU1S		11/06/2002	Field Sample	132-64-9	Dibenzofuran	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	1918-00-9	Dicamba	28	U	28	ug/kg
R6BU1S		11/06/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.7	U	4.7	ug/kg
R6BU1S		11/06/2002	Field Sample	75-09-2	Dichloromethane	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	120-36-5	Dichlorprop	140	U	140	ug/kg
R6BU1S		11/06/2002	Field Sample	60-57-1	Dieldrin	4.7	U	4.7	ug/kg
R6BU1S		11/06/2002	Field Sample	84-66-2	Diethyl Phthalate	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	131-11-3	Dimethyl Phthalate	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	84-74-2	Di-n-butylphthalate	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	117-84-0	Di-n-octylphthalate	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	88-85-7	Dinoseb	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	959-98-8	Endosulfan I	2.4	U	2.4	ug/kg
R6BU1S		11/06/2002	Field Sample	33213-65-9	Endosulfan II	4.7	U	4.7	ug/kg
R6BU1S		11/06/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.7	U	4.7	ug/kg
R6BU1S		11/06/2002	Field Sample	72-20-8	Endrin	4.7	U	4.7	ug/kg
R6BU1S		11/06/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.7	U	4.7	ug/kg
R6BU1S		11/06/2002	Field Sample	53494-70-5	Endrin Ketone	4.7	U	4.7	ug/kg
R6BU1S		11/06/2002	Field Sample	100-41-4	Ethylbenzene	2	J	0.83	ug/kg
R6BU1S		11/06/2002	Field Sample	206-44-0	Fluoranthene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	86-73-7	Fluorene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.4	U	2.4	ug/kg
R6BU1S		11/06/2002	Field Sample	5103-74-2	gamma-Chlordane	2.4	U	2.4	ug/kg
R6BU1S		11/06/2002	Field Sample	76-44-8	Heptachlor	2.4	U	2.4	ug/kg
R6BU1S		11/06/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.4	U	2.4	ug/kg
R6BU1S		11/06/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	14	U	14	ug/kg
R6BU1S		11/06/2002	Field Sample	118-74-1	Hexachlorobenzene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	9.6	U	9.6	ug/kg
R6BU1S		11/06/2002	Field Sample	87-68-3	Hexachlorobutadiene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	67-72-1	Hexachloroethane	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	7439-89-6	Iron	9100		0.05	mg/kg
R6BU1S		11/06/2002	Field Sample	78-59-1	Isophorone	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	7439-92-1	Lead	22		0.005	mg/kg
R6BU1S		11/06/2002	Field Sample	7439-95-4	Magnesium	2800		47	mg/kg
R6BU1S		11/06/2002	Field Sample	7439-96-5	Manganese	230		0.01	mg/kg
R6BU1S		11/06/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2800	U	2800	ug/kg
R6BU1S		11/06/2002	Field Sample	93-65-2	MCPP	2800	U	2800	ug/kg
R6BU1S		11/06/2002	Field Sample	7439-97-6	Mercury	0.035		0.017	mg/kg
R6BU1S		11/06/2002	Field Sample	72-43-5	Methoxychlor	24	UJ	24	ug/kg
R6BU1S		11/06/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	17	U	17	ug/kg
R6BU1S		11/06/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	4.7	U	4.7	ug/kg
R6BU1S		11/06/2002	Field Sample	91-20-3	Naphthalene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	7440-02-0	Nickel	9.5		0.04	mg/kg
R6BU1S		11/06/2002	Field Sample	98-95-3	Nitrobenzene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	24	U	24	ug/kg
R6BU1S		11/06/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	14	U	14	ug/kg
R6BU1S		11/06/2002	Field Sample	106-47-8	P-Chloroaniline	940	U	940	ug/kg
R6BU1S		11/06/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	9.6	U	9.6	ug/kg
R6BU1S		11/06/2002	Field Sample	87-86-5	Pentachlorophenol	24	U	24	ug/kg
R6BU1S		11/06/2002	Field Sample	PH	pH	7.5		1	units
R6BU1S		11/06/2002	Field Sample	85-01-8	Phenanthrene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	108-95-2	Phenol	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	100-01-6	P-Nitroaniline	2400	U	2400	ug/kg
R6BU1S		11/06/2002	Field Sample	7440-09-7	Potassium	500		94	mg/kg
R6BU1S		11/06/2002	Field Sample	129-00-0	Pyrene	470	U	470	ug/kg
R6BU1S		11/06/2002	Field Sample	7782-49-2	Selenium	1.3	U	1.3	mg/kg
R6BU1S		11/06/2002	Field Sample	7440-22-4	Silver	1.3	U	1.3	mg/kg
R6BU1S		11/06/2002	Field Sample	7440-23-5	Sodium	180	U	180	mg/kg
R6BU1S		11/06/2002	Field Sample	100-42-5	Styrene (Monomer)	3.3	UJ	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	9.6	U	9.6	ug/kg
R6BU1S		11/06/2002	Field Sample	127-18-4	Tetrachloroethene	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	7440-28-0	Thallium	1.3	U	1.3	mg/kg
R6BU1S		11/06/2002	Field Sample	108-88-3	Toluene	2.4	J	1	ug/kg
R6BU1S		11/06/2002	Field Sample	E-10195	Total Organic Carbon	11000		500	mg/kg
R6BU1S		11/06/2002	Field Sample	8001-35-2	Toxaphene	240	U	240	ug/kg
R6BU1S		11/06/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.7	U	4.7	ug/kg
R6BU1S		11/06/2002	Field Sample	79-01-6	Trichloroethylene	3.3	U	3.3	ug/kg
R6BU1S		11/06/2002	Field Sample	7440-62-2	Vanadium	11		0.01	mg/kg
R6BU1S		11/06/2002	Field Sample	75-01-4	Vinyl chloride	6.7	U	6.7	ug/kg
R6BU1S		11/06/2002	Field Sample	1330-20-7	Xylenes, Total	11		11	ug/kg
R6BU1S		11/06/2002	Field Sample	7440-66-6	Zinc	130		0.02	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM1S		11/07/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	75-34-3	1,1-Dichloroethane	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	75-35-4	1,1-Dichloroethylene	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	107-06-2	1,2-Dichloroethane	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	78-87-5	1,2-Dichloropropane	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	93-76-5	2,4,5-T	16	U	16	ug/kg
R6AM1S		11/07/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	16	U	16	ug/kg
R6AM1S		11/07/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	94-75-7	2,4-D	16	U	16	ug/kg
R6AM1S		11/07/2002	Field Sample	94-82-6	2,4-DB	16	U	16	ug/kg
R6AM1S		11/07/2002	Field Sample	120-83-2	2,4-Dichlorophenol	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	105-67-9	2,4-Dimethylphenol	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	51-28-5	2,4-Dinitrophenol	3300	U	3300	ug/kg
R6AM1S		11/07/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	78-93-3	2-Butanone (MEK)	5.5	J	8.8	ug/kg
R6AM1S		11/07/2002	Field Sample	91-58-7	2-Chloronaphthalene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	95-57-8	2-Chlorophenol	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	91-57-6	2-Methylnaphthalene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	88-74-4	2-Nitroaniline	3300	U	3300	ug/kg
R6AM1S		11/07/2002	Field Sample	88-75-5	2-Nitrophenol	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	1300	U	1300	ug/kg
R6AM1S		11/07/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	99-09-2	3-Nitroaniline	3300	U	3300	ug/kg
R6AM1S		11/07/2002	Field Sample	72-54-8	4,4'-DDD	6.3	R	6.3	ug/kg
R6AM1S		11/07/2002	Field Sample	72-55-9	4,4'-DDE	0.73	J	0.1	ug/kg
R6AM1S		11/07/2002	Field Sample	50-29-3	4,4'-DDT	6.3	R	6.3	ug/kg
R6AM1S		11/07/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	3300	U	3300	ug/kg
R6AM1S		11/07/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	37	U	37	ug/kg
R6AM1S		11/07/2002	Field Sample	100-02-7	4-Nitrophenol	3300	U	3300	ug/kg
R6AM1S		11/07/2002	Field Sample	83-32-9	Acenaphthene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	208-96-8	Acenaphthylene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	67-64-1	Acetone	150	J	18	ug/kg
R6AM1S		11/07/2002	Field Sample	309-00-2	Aldrin	2.1	J	0.05	ug/kg
R6AM1S		11/07/2002	Field Sample	319-84-6	alpha-BHC	3.3	R	3.3	ug/kg
R6AM1S		11/07/2002	Field Sample	5103-71-9	alpha-Chlordane	3.3	R	3.3	ug/kg
R6AM1S		11/07/2002	Field Sample	7429-90-5	Aluminum	7200		0.02	mg/kg
R6AM1S		11/07/2002	Field Sample	120-12-7	Anthracene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	7440-36-0	Antimony	3.2	U	3.2	mg/kg
R6AM1S		11/07/2002	Field Sample	7440-38-2	Arsenic	4.6		0.01	mg/kg
R6AM1S		11/07/2002	Field Sample	7440-39-3	Barium	140		0.94	mg/kg
R6AM1S		11/07/2002	Field Sample	71-43-2	Benzene	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	56-55-3	Benzo(a)anthracene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	50-32-8	Benzo(a)pyrene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	7440-41-7	Beryllium	0.48	J	0.004	mg/kg
R6AM1S		11/07/2002	Field Sample	319-85-7	beta-BHC	3.3	R	3.3	ug/kg
R6AM1S		11/07/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	75-27-4	Bromodichloromethane	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	75-25-2	Bromoform	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	74-83-9	Bromomethane	15	U	15	ug/kg
R6AM1S		11/07/2002	Field Sample	7440-43-9	Cadmium	0.72	J	0.005	mg/kg
R6AM1S		11/07/2002	Field Sample	7440-70-2	Calcium	13000		1.1	mg/kg
R6AM1S		11/07/2002	Field Sample	86-74-8	Carbazole	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	75-15-0	Carbon Disulfide	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	56-23-5	Carbon Tetrachloride	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	108-90-7	Chlorobenzene	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	124-48-1	Chlorodibromomethane	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	75-00-3	Chloroethane	15	U	15	ug/kg
R6AM1S		11/07/2002	Field Sample	67-66-3	Chloroform	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	74-87-3	Chloromethane	15	UJ	15	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM1S		11/07/2002	Field Sample	7440-47-3	Chromium	14		0.01	mg/kg
R6AM1S		11/07/2002	Field Sample	218-01-9	Chrysene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	7440-48-4	Cobalt	7.3	J	0.01	mg/kg
R6AM1S		11/07/2002	Field Sample	7440-50-8	Copper	14		0.01	mg/kg
R6AM1S		11/07/2002	Field Sample	75-99-0	Dalapon	3800	U	3800	ug/kg
R6AM1S		11/07/2002	Field Sample	2051-24-3	Decachlorobiphenyl	33	U	33	ug/kg
R6AM1S		11/07/2002	Field Sample	319-86-8	delta-BHC	3.3	R	3.3	ug/kg
R6AM1S		11/07/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	132-64-9	Dibenzofuran	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	1918-00-9	Dicamba	38	U	38	ug/kg
R6AM1S		11/07/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	6.3	U	6.3	ug/kg
R6AM1S		11/07/2002	Field Sample	75-09-2	Dichloromethane	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	120-36-5	Dichlorprop	190	U	190	ug/kg
R6AM1S		11/07/2002	Field Sample	60-57-1	Dieldrin	0.55	J	0.1	ug/kg
R6AM1S		11/07/2002	Field Sample	84-66-2	Diethyl Phthalate	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	131-11-3	Dimethyl Phthalate	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	84-74-2	Di-n-butylphthalate	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	117-84-0	Di-n-octylphthalate	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	88-85-7	Dinoseb	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	959-98-8	Endosulfan I	3.3	R	3.3	ug/kg
R6AM1S		11/07/2002	Field Sample	33213-65-9	Endosulfan II	6.3	R	6.3	ug/kg
R6AM1S		11/07/2002	Field Sample	1031-07-8	Endosulfan Sulfate	6.3	R	6.3	ug/kg
R6AM1S		11/07/2002	Field Sample	72-20-8	Endrin	6.3	R	6.3	ug/kg
R6AM1S		11/07/2002	Field Sample	7421-93-4	Endrin Aldehyde	6.3	R	6.3	ug/kg
R6AM1S		11/07/2002	Field Sample	53494-70-5	Endrin Ketone	6.3	R	6.3	ug/kg
R6AM1S		11/07/2002	Field Sample	100-41-4	Ethylbenzene	16		0.83	ug/kg
R6AM1S		11/07/2002	Field Sample	206-44-0	Fluoranthene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	86-73-7	Fluorene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	3.3	R	3.3	ug/kg
R6AM1S		11/07/2002	Field Sample	5103-74-2	gamma-Chlordane	3.3	R	3.3	ug/kg
R6AM1S		11/07/2002	Field Sample	76-44-8	Heptachlor	3.3	R	3.3	ug/kg
R6AM1S		11/07/2002	Field Sample	1024-57-3	Heptachlor Epoxide	3.3	U	3.3	ug/kg
R6AM1S		11/07/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	19	U	19	ug/kg
R6AM1S		11/07/2002	Field Sample	118-74-1	Hexachlorobenzene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	13	U	13	ug/kg
R6AM1S		11/07/2002	Field Sample	87-68-3	Hexachlorobutadiene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	67-72-1	Hexachloroethane	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	7439-89-6	Iron	15000		0.05	mg/kg
R6AM1S		11/07/2002	Field Sample	78-59-1	Isophorone	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	7439-92-1	Lead	29		0.005	mg/kg
R6AM1S		11/07/2002	Field Sample	7439-95-4	Magnesium	4600		47	mg/kg
R6AM1S		11/07/2002	Field Sample	7439-96-5	Manganese	780		0.01	mg/kg
R6AM1S		11/07/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	3800	U	3800	ug/kg
R6AM1S		11/07/2002	Field Sample	93-65-2	MCPP	3800	U	3800	ug/kg
R6AM1S		11/07/2002	Field Sample	7439-97-6	Mercury	0.067		0.017	mg/kg
R6AM1S		11/07/2002	Field Sample	72-43-5	Methoxychlor	33	R	33	ug/kg
R6AM1S		11/07/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	37	U	37	ug/kg
R6AM1S		11/07/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	6.3	U	6.3	ug/kg
R6AM1S		11/07/2002	Field Sample	91-20-3	Naphthalene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	7440-02-0	Nickel	15		0.04	mg/kg
R6AM1S		11/07/2002	Field Sample	98-95-3	Nitrobenzene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	33	U	33	ug/kg
R6AM1S		11/07/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	19	U	19	ug/kg
R6AM1S		11/07/2002	Field Sample	106-47-8	P-Chloroaniline	1300	U	1300	ug/kg
R6AM1S		11/07/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	13	U	13	ug/kg
R6AM1S		11/07/2002	Field Sample	87-86-5	Pentachlorophenol	33	U	33	ug/kg
R6AM1S		11/07/2002	Field Sample	PH	pH	7.1		1	units
R6AM1S		11/07/2002	Field Sample	85-01-8	Phenanthrene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	108-95-2	Phenol	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	100-01-6	P-Nitroaniline	3300	U	3300	ug/kg
R6AM1S		11/07/2002	Field Sample	7440-09-7	Potassium	870		94	mg/kg
R6AM1S		11/07/2002	Field Sample	129-00-0	Pyrene	630	U	630	ug/kg
R6AM1S		11/07/2002	Field Sample	7782-49-2	Selenium	1.6	U	1.6	mg/kg
R6AM1S		11/07/2002	Field Sample	7440-22-4	Silver	1.6	U	1.6	mg/kg
R6AM1S		11/07/2002	Field Sample	7440-23-5	Sodium	210	U	210	mg/kg
R6AM1S		11/07/2002	Field Sample	100-42-5	Styrene (Monomer)	37	J	1	ug/kg
R6AM1S		11/07/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	13	U	13	ug/kg
R6AM1S		11/07/2002	Field Sample	127-18-4	Tetrachloroethene	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	7440-28-0	Thallium	1.6	U	1.6	mg/kg
R6AM1S		11/07/2002	Field Sample	108-88-3	Toluene	12		1	ug/kg
R6AM1S		11/07/2002	Field Sample	E-10195	Total Organic Carbon	20000		500	mg/kg
R6AM1S		11/07/2002	Field Sample	8001-35-2	Toxaphene	330	R	330	ug/kg
R6AM1S		11/07/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	7.4	U	7.4	ug/kg
R6AM1S		11/07/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	6.3	U	6.3	ug/kg
R6AM1S		11/07/2002	Field Sample	79-01-6	Trichloroethylene	7.4	U	7.4	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM1S		11/07/2002	Field Sample	7440-62-2	Vanadium	19		0.01	mg/kg
R6AM1S		11/07/2002	Field Sample	75-01-4	Vinyl chloride	15	U	15	ug/kg
R6AM1S		11/07/2002	Field Sample	1330-20-7	Xylenes, Total	73		11	ug/kg
R6AM1S		11/07/2002	Field Sample	7440-66-6	Zinc	160		0.02	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	71-55-6	1,1,1-Trichloroethane	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	79-00-5	1,1,2-Trichloroethane	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	75-34-3	1,1-Dichloroethane	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	75-35-4	1,1-Dichloroethylene	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	120-82-1	1,2,4-Trichlorobenzene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	95-50-1	1,2-Dichlorobenzene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	107-06-2	1,2-Dichloroethane	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	540-59-0	1,2-Dichloroethene (total)	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	78-87-5	1,2-Dichloropropane	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	541-73-1	1,3-Dichlorobenzene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	106-46-7	1,4-Dichlorobenzene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	93-76-5	2,4,5-T	18	U	18	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	93-72-1	2,4,5-TP (Silvex)	18	U	18	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	95-95-4	2,4,5-Trichlorophenol	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	88-06-2	2,4,6-Trichlorophenol	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	94-75-7	2,4-D	18	U	18	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	94-82-6	2,4-DB	18	U	18	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	120-83-2	2,4-Dichlorophenol	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	105-67-9	2,4-Dimethylphenol	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	51-28-5	2,4-Dinitrophenol	3800	U	3800	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	121-14-2	2,4-Dinitrotoluene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	606-20-2	2,6-Dinitrotoluene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	78-93-3	2-Butanone (MEK)	51	U	51	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	91-58-7	2-Chloronaphthalene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	95-57-8	2-Chlorophenol	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	91-57-6	2-Methylnaphthalene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	95-48-7	2-Methylphenol (o-Cresol)	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	88-74-4	2-Nitroaniline	3800	U	3800	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	88-75-5	2-Nitrophenol	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	91-94-1	3,3'-Dichlorobenzidine	1500	U	1500	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	99-09-2	3-Nitroaniline	3800	U	3800	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	72-54-8	4,4'-DDD	7.3	UJ	7.3	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	72-55-9	4,4'-DDE	1.5	J	0.1	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	50-29-3	4,4'-DDT	7.3	UJ	7.3	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	534-52-1	4,6-Dinitro-2-methylphenol	3800	U	3800	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	101-55-3	4-Bromophenyl Phenyl Ether	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	59-50-7	4-Chloro-3-methylphenol	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7005-72-3	4-Chlorophenyl Phenyl Ether	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	108-10-1	4-Methyl-2-pentanone (MIBK)	51	U	51	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	100-02-7	4-Nitrophenol	3800	U	3800	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	83-32-9	Acenaphthene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	208-96-8	Acenaphthylene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	67-64-1	Acetone	24	J	18	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	309-00-2	Aldrin	3.8	UJ	3.8	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	319-84-6	alpha-BHC	3.8	UJ	3.8	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	5103-71-9	alpha-Chlordane	3.8	UJ	3.8	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7429-90-5	Aluminum	9400		0.02	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	120-12-7	Anthracene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-36-0	Antimony	4.4	U	4.4	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-38-2	Arsenic	5.9		0.01	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-39-3	Barium	210		0.94	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	71-43-2	Benzene	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	56-55-3	Benzo(a)anthracene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	50-32-8	Benzo(a)pyrene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	205-99-2	Benzo(b)fluoranthene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	191-24-2	Benzo(g,h,i)perylene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	207-08-9	Benzo(k)fluoranthene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	85-68-7	Benzyl Butyl Phthalate	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-41-7	Beryllium	0.64	J	0.004	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	319-85-7	beta-BHC	3.8	UJ	3.8	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	111-91-1	bis(2-Chloroethoxy)methane	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	111-44-4	bis(2-Chloroethyl)ether	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	117-81-7	bis(2-Ethylhexyl)phthalate	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	75-27-4	Bromodichloromethane	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	75-25-2	Bromoform	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	74-83-9	Bromomethane	20	U	20	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-43-9	Cadmium	1.2		0.005	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-70-2	Calcium	18000		1.1	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	86-74-8	Carbazole	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	75-15-0	Carbon Disulfide	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	56-23-5	Carbon Tetrachloride	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	108-90-7	Chlorobenzene	10	U	10	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	124-48-1	Chlorodibromomethane	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	75-00-3	Chloroethane	20	U	20	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	67-66-3	Chloroform	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	74-87-3	Chloromethane	20	UJ	20	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-47-3	Chromium	19		0.01	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	218-01-9	Chrysene	38	J	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	10061-01-5	cis-1,3-Dichloropropene	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-48-4	Cobalt	10	J	0.01	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-50-8	Copper	20		0.01	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	75-99-0	Dalapon	4400	U	4400	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	2051-24-3	Decachlorobiphenyl	38	U	38	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	319-86-8	delta-BHC	3.8	UJ	3.8	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	53-70-3	Dibenzo(a,h)anthracene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	132-64-9	Dibenzofuran	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	1918-00-9	Dicamba	44	U	44	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	C-DICHLOROBI	Dichlorobiphenyl	7.3	U	7.3	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	75-09-2	Dichloromethane	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	120-36-5	Dichlorprop	220	U	220	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	60-57-1	Dieldrin	7.3	UJ	7.3	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	84-66-2	Diethyl Phthalate	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	131-11-3	Dimethyl Phthalate	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	84-74-2	Di-n-butylphthalate	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	117-84-0	Di-n-octylphthalate	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	88-85-7	Dinoseb	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	959-98-8	Endosulfan I	3.8	UJ	3.8	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	33213-65-9	Endosulfan II	7.3	UJ	7.3	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	1031-07-8	Endosulfan Sulfate	7.3	UJ	7.3	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	72-20-8	Endrin	7.3	UJ	7.3	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7421-93-4	Endrin Aldehyde	7.3	UJ	7.3	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	53494-70-5	Endrin Ketone	7.3	UJ	7.3	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	100-41-4	Ethylbenzene	14		0.83	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	206-44-0	Fluoranthene	56	J	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	86-73-7	Fluorene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	58-89-9	gamma-BHC (Lindane)	3.8	UJ	3.8	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	5103-74-2	gamma-Chlordane	0.45	J	0.05	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	76-44-8	Heptachlor	3.8	UJ	3.8	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	1024-57-3	Heptachlor Epoxide	3.8	UJ	3.8	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	C-HEPTACHLOR	Heptachlorobiphenyl	22	U	22	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	118-74-1	Hexachlorobenzene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	C-HEXACHLORO	Hexachlorobiphenyl	15	U	15	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	87-68-3	Hexachlorobutadiene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	77-47-4	Hexachlorocyclopentadiene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	67-72-1	Hexachloroethane	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	193-39-5	Indeno(1,2,3-cd)pyrene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7439-89-6	Iron	20000		0.05	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	78-59-1	Isophorone	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7439-92-1	Lead	35		0.005	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7439-95-4	Magnesium	6400		47	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7439-96-5	Manganese	1000		0.01	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	4400	U	4400	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	93-65-2	MCPP	4400	U	4400	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7439-97-6	Mercury	0.061		0.017	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	72-43-5	Methoxychlor	38	UJ	38	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	591-78-6	Methyl N-Butyl Ketone	51	U	51	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	C-MONOCHLORO	Monochlorobiphenyl	7.3	U	7.3	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	91-20-3	Naphthalene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-02-0	Nickel	21		0.04	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	98-95-3	Nitrobenzene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	621-64-7	N-Nitroso-di-n-propylamine	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	86-30-6	N-Nitrosodiphenylamine	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	C-NONACHLORO	Nonachlorobiphenyl	38	U	38	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	C-OCTA-BIPHE	Octachlorobiphenyl	22	U	22	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	106-47-8	P-Chloroaniline	1500	U	1500	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	C-PENTBIPHEN	Pentachlorobiphenyl	15	U	15	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	87-86-5	Pentachlorophenol	38	U	38	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	PH	pH	7.1		1	units
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	85-01-8	Phenanthrene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	108-95-2	Phenol	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	100-01-6	P-Nitroaniline	3800	U	3800	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-09-7	Potassium	1200		94	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	129-00-0	Pyrene	730	U	730	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7782-49-2	Selenium	2.2	U	2.2	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-22-4	Silver	2.2	U	2.2	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-23-5	Sodium	260	U	260	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	100-42-5	Styrene (Monomer)	10	UJ	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	C-TETRACHLOR	Tetrachlorobiphenyl	15	U	15	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	127-18-4	Tetrachloroethene	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-28-0	Thallium	2.2	UJ	2.2	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	108-88-3	Toluene	14		1	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	E-10195	Total Organic Carbon	15000		500	mg/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	8001-35-2	Toxaphene	380	UJ	380	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	10061-02-6	trans-1,3-Dichloropropene	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	C-TRICHLOROB	Trichlorobiphenyl	7.3	U	7.3	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	79-01-6	Trichloroethylene	10	U	10	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-62-2	Vanadium	25		0.01	mg/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	75-01-4	Vinyl chloride	20	U	20	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	1330-20-7	Xylenes, Total	81		11	ug/kg
R6AM2S	R6AM1S	11/07/2002	Field Duplicate	7440-66-6	Zinc	260		0.02	mg/kg
R6BM1S		11/07/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	75-34-3	1,1-Dichloroethane	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	75-35-4	1,1-Dichloroethylene	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.011		0.0011	ug/kg
R6BM1S		11/07/2002	Field Sample	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.0014	U	0.0014	ug/kg
R6BM1S		11/07/2002	Field Sample	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.00088	U	0.00088	ug/kg
R6BM1S		11/07/2002	Field Sample	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.0011	U	0.0011	ug/kg
R6BM1S		11/07/2002	Field Sample	70648-26-9	1,2,3,4,7,8-HxCDF	0.00097	U	0.00097	ug/kg
R6BM1S		11/07/2002	Field Sample	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.0012	U	0.0012	ug/kg
R6BM1S		11/07/2002	Field Sample	57117-44-9	1,2,3,6,7,8-HxCDF	0.00097	U	0.00097	ug/kg
R6BM1S		11/07/2002	Field Sample	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.0011	U	0.0011	ug/kg
R6BM1S		11/07/2002	Field Sample	72918-21-9	1,2,3,7,8,9-HxCDF	0.0013	U	0.0013	ug/kg
R6BM1S		11/07/2002	Field Sample	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	0.00078	U	0.00078	ug/kg
R6BM1S		11/07/2002	Field Sample	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.0013	U	0.0013	ug/kg
R6BM1S		11/07/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	107-06-2	1,2-Dichloroethane	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	78-87-5	1,2-Dichloropropane	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	60851-34-5	2,3,4,6,7,8-HxCDF	0.0011	U	0.0011	ug/kg
R6BM1S		11/07/2002	Field Sample	57117-31-4	2,3,4,7,8-PeCDF	0.00078	U	0.00078	ug/kg
R6BM1S		11/07/2002	Field Sample	1746-01-6	2,3,7,8-TCDD	0.00053	U	0.00053	ug/kg
R6BM1S		11/07/2002	Field Sample	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	0.00044	U	0.00044	ug/kg
R6BM1S		11/07/2002	Field Sample	93-76-5	2,4,5-T	11	U	11	ug/kg
R6BM1S		11/07/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	11	U	11	ug/kg
R6BM1S		11/07/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	94-75-7	2,4-D	11	U	11	ug/kg
R6BM1S		11/07/2002	Field Sample	94-82-6	2,4-DB	11	U	11	ug/kg
R6BM1S		11/07/2002	Field Sample	120-83-2	2,4-Dichlorophenol	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	105-67-9	2,4-Dimethylphenol	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2300	U	2300	ug/kg
R6BM1S		11/07/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	78-93-3	2-Butanone (MEK)	22	U	22	ug/kg
R6BM1S		11/07/2002	Field Sample	91-58-7	2-Chloronaphthalene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	95-57-8	2-Chlorophenol	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	91-57-6	2-Methylnaphthalene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	88-74-4	2-Nitroaniline	2300	U	2300	ug/kg
R6BM1S		11/07/2002	Field Sample	88-75-5	2-Nitrophenol	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	880	U	880	ug/kg
R6BM1S		11/07/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	99-09-2	3-Nitroaniline	2300	U	2300	ug/kg
R6BM1S		11/07/2002	Field Sample	72-54-8	4,4'-DDD	4.4	UJ	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	72-55-9	4,4'-DDE	0.57	J	0.1	ug/kg
R6BM1S		11/07/2002	Field Sample	50-29-3	4,4'-DDT	4.4	UJ	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2300	U	2300	ug/kg
R6BM1S		11/07/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	22	U	22	ug/kg
R6BM1S		11/07/2002	Field Sample	100-02-7	4-Nitrophenol	2300	U	2300	ug/kg
R6BM1S		11/07/2002	Field Sample	83-32-9	Acenaphthene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	208-96-8	Acenaphthylene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	67-64-1	Acetone	37	J	18	ug/kg
R6BM1S		11/07/2002	Field Sample	309-00-2	Aldrin	2.3	UJ	2.3	ug/kg
R6BM1S		11/07/2002	Field Sample	319-84-6	alpha-BHC	2.3	UJ	2.3	ug/kg
R6BM1S		11/07/2002	Field Sample	5103-71-9	alpha-Chlordane	2.3	UJ	2.3	ug/kg
R6BM1S		11/07/2002	Field Sample	7429-90-5	Aluminum	1900		0.02	mg/kg
R6BM1S		11/07/2002	Field Sample	120-12-7	Anthracene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	7440-36-0	Antimony	2.4	U	2.4	mg/kg
R6BM1S		11/07/2002	Field Sample	7440-38-2	Arsenic	2.9	J	0.01	mg/kg
R6BM1S		11/07/2002	Field Sample	7440-39-3	Barium	77		0.94	mg/kg
R6BM1S		11/07/2002	Field Sample	71-43-2	Benzene	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	56-55-3	Benzo(a)anthracene	440	U	440	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6BM1S		11/07/2002	Field Sample	50-32-8	Benzo(a)pyrene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	7440-41-7	Beryllium	0.15	J	0.004	mg/kg
R6BM1S		11/07/2002	Field Sample	319-85-7	beta-BHC	2.3	UJ	2.3	ug/kg
R6BM1S		11/07/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	75-27-4	Bromodichloromethane	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	75-25-2	Bromoform	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	74-83-9	Bromomethane	8.9	U	8.9	ug/kg
R6BM1S		11/07/2002	Field Sample	7440-43-9	Cadmium	0.36	J	0.005	mg/kg
R6BM1S		11/07/2002	Field Sample	7440-70-2	Calcium	5900		1.1	mg/kg
R6BM1S		11/07/2002	Field Sample	86-74-8	Carbazole	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	75-15-0	Carbon Disulfide	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	56-23-5	Carbon Tetrachloride	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	108-90-7	Chlorobenzene	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	124-48-1	Chlorodibromomethane	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	75-00-3	Chloroethane	8.9	U	8.9	ug/kg
R6BM1S		11/07/2002	Field Sample	67-66-3	Chloroform	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	74-87-3	Chloromethane	8.9	UJ	8.9	ug/kg
R6BM1S		11/07/2002	Field Sample	7440-47-3	Chromium	4.8		0.01	mg/kg
R6BM1S		11/07/2002	Field Sample	218-01-9	Chrysene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	7440-48-4	Cobalt	3.7	J	0.01	mg/kg
R6BM1S		11/07/2002	Field Sample	7440-50-8	Copper	3.4		0.01	mg/kg
R6BM1S		11/07/2002	Field Sample	75-99-0	Dalapon	2700	U	2700	ug/kg
R6BM1S		11/07/2002	Field Sample	2051-24-3	Decachlorobiphenyl	23	U	23	ug/kg
R6BM1S		11/07/2002	Field Sample	319-86-8	delta-BHC	2.3	UJ	2.3	ug/kg
R6BM1S		11/07/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	132-64-9	Dibenzofuran	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	1918-00-9	Dicamba	27	U	27	ug/kg
R6BM1S		11/07/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	75-09-2	Dichloromethane	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	120-36-5	Dichlorprop	130	U	130	ug/kg
R6BM1S		11/07/2002	Field Sample	60-57-1	Dieldrin	4.4	UJ	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	84-66-2	Diethyl Phthalate	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	131-11-3	Dimethyl Phthalate	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	84-74-2	Di-n-butylphthalate	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	117-84-0	Di-n-octylphthalate	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	88-85-7	Dinoseb	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	959-98-8	Endosulfan I	2.3	UJ	2.3	ug/kg
R6BM1S		11/07/2002	Field Sample	33213-65-9	Endosulfan II	4.4	UJ	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.4	UJ	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	72-20-8	Endrin	4.4	UJ	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.4	UJ	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	53494-70-5	Endrin Ketone	4.4	UJ	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	100-41-4	Ethylbenzene	3.8	J	0.83	ug/kg
R6BM1S		11/07/2002	Field Sample	206-44-0	Fluoranthene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	86-73-7	Fluorene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.3	UJ	2.3	ug/kg
R6BM1S		11/07/2002	Field Sample	5103-74-2	gamma-Chlordane	0.4	J	0.05	ug/kg
R6BM1S		11/07/2002	Field Sample	76-44-8	Heptachlor	2.3	UJ	2.3	ug/kg
R6BM1S		11/07/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.3	U	2.3	ug/kg
R6BM1S		11/07/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	13	U	13	ug/kg
R6BM1S		11/07/2002	Field Sample	118-74-1	Hexachlorobenzene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.9	U	8.9	ug/kg
R6BM1S		11/07/2002	Field Sample	87-68-3	Hexachlorobutadiene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	67-72-1	Hexachloroethane	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	7439-89-6	Iron	6900		0.05	mg/kg
R6BM1S		11/07/2002	Field Sample	78-59-1	Isophorone	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	7439-92-1	Lead	10		0.005	mg/kg
R6BM1S		11/07/2002	Field Sample	7439-95-4	Magnesium	2200		47	mg/kg
R6BM1S		11/07/2002	Field Sample	7439-96-5	Manganese	140		0.01	mg/kg
R6BM1S		11/07/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2700	U	2700	ug/kg
R6BM1S		11/07/2002	Field Sample	93-65-2	MCPP	2700	U	2700	ug/kg
R6BM1S		11/07/2002	Field Sample	7439-97-6	Mercury	0.015	J	0.017	mg/kg
R6BM1S		11/07/2002	Field Sample	72-43-5	Methoxychlor	23	UJ	23	ug/kg
R6BM1S		11/07/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	22	U	22	ug/kg
R6BM1S		11/07/2002	Field Sample	C-MONOCHLORO	Monochlorobiphenyl	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	91-20-3	Naphthalene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	7440-02-0	Nickel	8.1		0.04	mg/kg
R6BM1S		11/07/2002	Field Sample	98-95-3	Nitrobenzene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	C-NONACHLORO	Nonachlorobiphenyl	23	U	23	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6BM1S		11/07/2002	Field Sample	3268-87-9	OCDD	0.25	J	0.000033	ug/kg
R6BM1S		11/07/2002	Field Sample	39001-02-0	OCDF	0.008	J	0.0006	ug/kg
R6BM1S		11/07/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	13	U	13	ug/kg
R6BM1S		11/07/2002	Field Sample	106-47-8	P-Chloroaniline	880	U	880	ug/kg
R6BM1S		11/07/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.9	U	8.9	ug/kg
R6BM1S		11/07/2002	Field Sample	87-86-5	Pentachlorophenol	23	U	23	ug/kg
R6BM1S		11/07/2002	Field Sample	MOIST	Percent Moisture	26.9		1	%
R6BM1S		11/07/2002	Field Sample	PH	pH	7.5		1	units
R6BM1S		11/07/2002	Field Sample	85-01-8	Phenanthrene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	108-95-2	Phenol	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	100-01-6	P-Nitroaniline	2300	U	2300	ug/kg
R6BM1S		11/07/2002	Field Sample	7440-09-7	Potassium	360		94	mg/kg
R6BM1S		11/07/2002	Field Sample	129-00-0	Pyrene	440	U	440	ug/kg
R6BM1S		11/07/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R6BM1S		11/07/2002	Field Sample	7440-22-4	Silver	1.2	U	1.2	mg/kg
R6BM1S		11/07/2002	Field Sample	7440-23-5	Sodium	110	U	110	mg/kg
R6BM1S		11/07/2002	Field Sample	100-42-5	Styrene (Monomer)	4.4	UJ	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.9	U	8.9	ug/kg
R6BM1S		11/07/2002	Field Sample	127-18-4	Tetrachloroethene	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	7440-28-0	Thallium	1.2	UJ	1.2	mg/kg
R6BM1S		11/07/2002	Field Sample	108-88-3	Toluene	3.7	J	1	ug/kg
R6BM1S		11/07/2002	Field Sample	37871-00-4	Total HpCDD	0.021		0.0011	ug/kg
R6BM1S		11/07/2002	Field Sample	38998-75-3	Total HpCDF	0.0043		0.00042	ug/kg
R6BM1S		11/07/2002	Field Sample	34465-46-8	Total HxCDD	0.0012	U	0.0012	ug/kg
R6BM1S		11/07/2002	Field Sample	55684-94-1	Total HxCDF	0.0013	U	0.0013	ug/kg
R6BM1S		11/07/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R6BM1S		11/07/2002	Field Sample	36088-22-9	Total PeCDD	0.0013	U	0.0013	ug/kg
R6BM1S		11/07/2002	Field Sample	30402-15-4	Total PeCDF	0.00081	U	0.00081	ug/kg
R6BM1S		11/07/2002	Field Sample	41903-57-5	Total TCDD	0.001		0.00013	ug/kg
R6BM1S		11/07/2002	Field Sample	55722-27-5	Total TCDF	0.00044	U	0.00044	ug/kg
R6BM1S		11/07/2002	Field Sample	8001-35-2	Toxaphene	230	UJ	230	ug/kg
R6BM1S		11/07/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	79-01-6	Trichloroethylene	4.4	U	4.4	ug/kg
R6BM1S		11/07/2002	Field Sample	7440-62-2	Vanadium	7.6		0.01	mg/kg
R6BM1S		11/07/2002	Field Sample	75-01-4	Vinyl chloride	8.9	U	8.9	ug/kg
R6BM1S		11/07/2002	Field Sample	1330-20-7	Xylenes, Total	21		11	ug/kg
R6BM1S		11/07/2002	Field Sample	7440-66-6	Zinc	91		0.02	mg/kg
R6CM1S		11/07/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	75-34-3	1,1-Dichloroethane	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	75-35-4	1,1-Dichloroethylene	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	107-06-2	1,2-Dichloroethane	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	78-87-5	1,2-Dichloropropane	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	93-76-5	2,4,5-T	10	U	10	ug/kg
R6CM1S		11/07/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg
R6CM1S		11/07/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	94-75-7	2,4-D	10	U	10	ug/kg
R6CM1S		11/07/2002	Field Sample	94-82-6	2,4-DB	10	U	10	ug/kg
R6CM1S		11/07/2002	Field Sample	120-83-2	2,4-Dichlorophenol	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	105-67-9	2,4-Dimethylphenol	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2200	U	2200	ug/kg
R6CM1S		11/07/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	78-93-3	2-Butanone (MEK)	15	U	15	ug/kg
R6CM1S		11/07/2002	Field Sample	91-58-7	2-Chloronaphthalene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	95-57-8	2-Chlorophenol	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	91-57-6	2-Methylnaphthalene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	88-74-4	2-Nitroaniline	2200	U	2200	ug/kg
R6CM1S		11/07/2002	Field Sample	88-75-5	2-Nitrophenol	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	840	U	840	ug/kg
R6CM1S		11/07/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	99-09-2	3-Nitroaniline	2200	U	2200	ug/kg
R6CM1S		11/07/2002	Field Sample	72-54-8	4,4'-DDD	4.2	R	4.2	ug/kg
R6CM1S		11/07/2002	Field Sample	72-55-9	4,4'-DDE	4.2	R	4.2	ug/kg
R6CM1S		11/07/2002	Field Sample	50-29-3	4,4'-DDT	4.2	R	4.2	ug/kg
R6CM1S		11/07/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2200	U	2200	ug/kg
R6CM1S		11/07/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	420	U	420	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6CM1S		11/07/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	15	U	15	ug/kg
R6CM1S		11/07/2002	Field Sample	100-02-7	4-Nitrophenol	2200	U	2200	ug/kg
R6CM1S		11/07/2002	Field Sample	83-32-9	Acenaphthene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	208-96-8	Acenaphthylene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	67-64-1	Acetone	5.5	J	18	ug/kg
R6CM1S		11/07/2002	Field Sample	309-00-2	Aldrin	2.2	R	2.2	ug/kg
R6CM1S		11/07/2002	Field Sample	319-84-6	alpha-BHC	2.2	R	2.2	ug/kg
R6CM1S		11/07/2002	Field Sample	5103-71-9	alpha-Chlordane	2.2	R	2.2	ug/kg
R6CM1S		11/07/2002	Field Sample	7429-90-5	Aluminum	790		0.02	mg/kg
R6CM1S		11/07/2002	Field Sample	120-12-7	Anthracene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	7440-36-0	Antimony	2.3	U	2.3	mg/kg
R6CM1S		11/07/2002	Field Sample	7440-38-2	Arsenic	1.4	J	0.01	mg/kg
R6CM1S		11/07/2002	Field Sample	7440-39-3	Barium	21		0.94	mg/kg
R6CM1S		11/07/2002	Field Sample	71-43-2	Benzene	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	56-55-3	Benzo(a)anthracene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	50-32-8	Benzo(a)pyrene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	7440-41-7	Beryllium	0.057	J	0.004	mg/kg
R6CM1S		11/07/2002	Field Sample	319-85-7	beta-BHC	2.2	R	2.2	ug/kg
R6CM1S		11/07/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	75-27-4	Bromodichloromethane	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	75-25-2	Bromoform	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	74-83-9	Bromomethane	6	U	6	ug/kg
R6CM1S		11/07/2002	Field Sample	7440-43-9	Cadmium	0.58	U	0.58	mg/kg
R6CM1S		11/07/2002	Field Sample	7440-70-2	Calcium	2500		1.1	mg/kg
R6CM1S		11/07/2002	Field Sample	86-74-8	Carbazole	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	75-15-0	Carbon Disulfide	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	56-23-5	Carbon Tetrachloride	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	108-90-7	Chlorobenzene	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	124-48-1	Chlorodibromomethane	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	75-00-3	Chloroethane	6	U	6	ug/kg
R6CM1S		11/07/2002	Field Sample	67-66-3	Chloroform	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	74-87-3	Chloromethane	6	UJ	6	ug/kg
R6CM1S		11/07/2002	Field Sample	7440-47-3	Chromium	2.6		0.01	mg/kg
R6CM1S		11/07/2002	Field Sample	218-01-9	Chrysene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	7440-48-4	Cobalt	2.3	J	0.01	mg/kg
R6CM1S		11/07/2002	Field Sample	7440-50-8	Copper	2.3	U	2.3	mg/kg
R6CM1S		11/07/2002	Field Sample	75-99-0	Dalapon	2500	U	2500	ug/kg
R6CM1S		11/07/2002	Field Sample	2051-24-3	Decachlorobiphenyl	22	U	22	ug/kg
R6CM1S		11/07/2002	Field Sample	319-86-8	delta-BHC	2.2	R	2.2	ug/kg
R6CM1S		11/07/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	132-64-9	Dibenzofuran	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	1918-00-9	Dicamba	25	U	25	ug/kg
R6CM1S		11/07/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	4.2	U	4.2	ug/kg
R6CM1S		11/07/2002	Field Sample	75-09-2	Dichloromethane	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	120-36-5	Dichlorprop	130	U	130	ug/kg
R6CM1S		11/07/2002	Field Sample	60-57-1	Dieldrin	4.2	R	4.2	ug/kg
R6CM1S		11/07/2002	Field Sample	84-66-2	Diethyl Phthalate	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	131-11-3	Dimethyl Phthalate	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	84-74-2	Di-n-butylphthalate	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	117-84-0	Di-n-octylphthalate	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	88-85-7	Dinoseb	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	959-98-8	Endosulfan I	2.2	R	2.2	ug/kg
R6CM1S		11/07/2002	Field Sample	33213-65-9	Endosulfan II	4.2	R	4.2	ug/kg
R6CM1S		11/07/2002	Field Sample	1031-07-8	Endosulfan Sulfate	4.2	R	4.2	ug/kg
R6CM1S		11/07/2002	Field Sample	72-20-8	Endrin	4.2	R	4.2	ug/kg
R6CM1S		11/07/2002	Field Sample	7421-93-4	Endrin Aldehyde	4.2	R	4.2	ug/kg
R6CM1S		11/07/2002	Field Sample	53494-70-5	Endrin Ketone	4.2	R	4.2	ug/kg
R6CM1S		11/07/2002	Field Sample	100-41-4	Ethylbenzene	3.8		0.83	ug/kg
R6CM1S		11/07/2002	Field Sample	206-44-0	Fluoranthene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	86-73-7	Fluorene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.2	R	2.2	ug/kg
R6CM1S		11/07/2002	Field Sample	5103-74-2	gamma-Chlordane	2.2	R	2.2	ug/kg
R6CM1S		11/07/2002	Field Sample	76-44-8	Heptachlor	2.2	R	2.2	ug/kg
R6CM1S		11/07/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.2	U	2.2	ug/kg
R6CM1S		11/07/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	13	U	13	ug/kg
R6CM1S		11/07/2002	Field Sample	118-74-1	Hexachlorobenzene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	8.5	U	8.5	ug/kg
R6CM1S		11/07/2002	Field Sample	87-68-3	Hexachlorobutadiene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	67-72-1	Hexachloroethane	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	7439-89-6	Iron	4200		0.05	mg/kg
R6CM1S		11/07/2002	Field Sample	78-59-1	Isophorone	420	U	420	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6CM1S		11/07/2002	Field Sample	7439-92-1	Lead	3		0.005	mg/kg
R6CM1S		11/07/2002	Field Sample	7439-95-4	Magnesium	770		47	mg/kg
R6CM1S		11/07/2002	Field Sample	7439-96-5	Manganese	130		0.01	mg/kg
R6CM1S		11/07/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2500	U	2500	ug/kg
R6CM1S		11/07/2002	Field Sample	93-65-2	MCPP	2500	U	2500	ug/kg
R6CM1S		11/07/2002	Field Sample	7439-97-6	Mercury	0.021	U	0.021	mg/kg
R6CM1S		11/07/2002	Field Sample	72-43-5	Methoxychlor	22	R	22	ug/kg
R6CM1S		11/07/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	15	U	15	ug/kg
R6CM1S		11/07/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	4.2	U	4.2	ug/kg
R6CM1S		11/07/2002	Field Sample	91-20-3	Naphthalene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	7440-02-0	Nickel	5.4		0.04	mg/kg
R6CM1S		11/07/2002	Field Sample	98-95-3	Nitrobenzene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	C-NONACHLOR(	Nonachlorobiphenyl	22	U	22	ug/kg
R6CM1S		11/07/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	13	U	13	ug/kg
R6CM1S		11/07/2002	Field Sample	106-47-8	P-Chloroaniline	840	U	840	ug/kg
R6CM1S		11/07/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	8.5	U	8.5	ug/kg
R6CM1S		11/07/2002	Field Sample	87-86-5	Pentachlorophenol	22	U	22	ug/kg
R6CM1S		11/07/2002	Field Sample	PH	pH	7.6		1	units
R6CM1S		11/07/2002	Field Sample	85-01-8	Phenanthrene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	108-95-2	Phenol	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	100-01-6	P-Nitroaniline	2200	U	2200	ug/kg
R6CM1S		11/07/2002	Field Sample	7440-09-7	Potassium	160		94	mg/kg
R6CM1S		11/07/2002	Field Sample	129-00-0	Pyrene	420	U	420	ug/kg
R6CM1S		11/07/2002	Field Sample	7782-49-2	Selenium	1.2	U	1.2	mg/kg
R6CM1S		11/07/2002	Field Sample	7440-22-4	Silver	1.2	U	1.2	mg/kg
R6CM1S		11/07/2002	Field Sample	7440-23-5	Sodium	80	U	80	mg/kg
R6CM1S		11/07/2002	Field Sample	100-42-5	Styrene (Monomer)	3	UJ	3	ug/kg
R6CM1S		11/07/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	8.5	U	8.5	ug/kg
R6CM1S		11/07/2002	Field Sample	127-18-4	Tetrachloroethene	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	7440-28-0	Thallium	1.2	UJ	1.2	mg/kg
R6CM1S		11/07/2002	Field Sample	108-88-3	Toluene	4.4		1	ug/kg
R6CM1S		11/07/2002	Field Sample	E-10195	Total Organic Carbon	500	U	500	mg/kg
R6CM1S		11/07/2002	Field Sample	8001-35-2	Toxaphene	220	R	220	ug/kg
R6CM1S		11/07/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	4.2	U	4.2	ug/kg
R6CM1S		11/07/2002	Field Sample	79-01-6	Trichloroethylene	3	U	3	ug/kg
R6CM1S		11/07/2002	Field Sample	7440-62-2	Vanadium	3.7		0.01	mg/kg
R6CM1S		11/07/2002	Field Sample	75-01-4	Vinyl chloride	6	U	6	ug/kg
R6CM1S		11/07/2002	Field Sample	1330-20-7	Xylenes, Total	22		11	ug/kg
R6CM1S		11/07/2002	Field Sample	7440-66-6	Zinc	9.4		0.02	mg/kg
R6AD1S		11/06/2002	Field Sample	71-55-6	1,1,1-Trichloroethane	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	79-00-5	1,1,2-Trichloroethane	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	75-34-3	1,1-Dichloroethane	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	75-35-4	1,1-Dichloroethylene	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	120-82-1	1,2,4-Trichlorobenzene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	95-50-1	1,2-Dichlorobenzene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	107-06-2	1,2-Dichloroethane	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	540-59-0	1,2-Dichloroethene (total)	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	78-87-5	1,2-Dichloropropane	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	541-73-1	1,3-Dichlorobenzene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	106-46-7	1,4-Dichlorobenzene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	93-76-5	2,4,5-T	14	U	14	ug/kg
R6AD1S		11/06/2002	Field Sample	93-72-1	2,4,5-TP (Silvex)	14	U	14	ug/kg
R6AD1S		11/06/2002	Field Sample	95-95-4	2,4,5-Trichlorophenol	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	88-06-2	2,4,6-Trichlorophenol	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	94-75-7	2,4-D	14	U	14	ug/kg
R6AD1S		11/06/2002	Field Sample	94-82-6	2,4-DB	14	U	14	ug/kg
R6AD1S		11/06/2002	Field Sample	120-83-2	2,4-Dichlorophenol	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	105-67-9	2,4-Dimethylphenol	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	51-28-5	2,4-Dinitrophenol	2900	U	2900	ug/kg
R6AD1S		11/06/2002	Field Sample	121-14-2	2,4-Dinitrotoluene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	606-20-2	2,6-Dinitrotoluene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	78-93-3	2-Butanone (MEK)	3	J	8.8	ug/kg
R6AD1S		11/06/2002	Field Sample	91-58-7	2-Chloronaphthalene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	95-57-8	2-Chlorophenol	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	91-57-6	2-Methylnaphthalene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	88-74-4	2-Nitroaniline	2900	U	2900	ug/kg
R6AD1S		11/06/2002	Field Sample	88-75-5	2-Nitrophenol	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	91-94-1	3,3'-Dichlorobenzidine	1100	U	1100	ug/kg
R6AD1S		11/06/2002	Field Sample	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	99-09-2	3-Nitroaniline	2900	U	2900	ug/kg
R6AD1S		11/06/2002	Field Sample	72-54-8	4,4'-DDD	5.7	U	5.7	ug/kg
R6AD1S		11/06/2002	Field Sample	72-55-9	4,4'-DDE	1.7	J	0.1	ug/kg
R6AD1S		11/06/2002	Field Sample	50-29-3	4,4'-DDT	5.7	UJ	5.7	ug/kg

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6AD1S		11/06/2002	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2900	U	2900	ug/kg
R6AD1S		11/06/2002	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	59-50-7	4-Chloro-3-methylphenol	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	22	U	22	ug/kg
R6AD1S		11/06/2002	Field Sample	100-02-7	4-Nitrophenol	2900	U	2900	ug/kg
R6AD1S		11/06/2002	Field Sample	83-32-9	Acenaphthene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	208-96-8	Acenaphthylene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	67-64-1	Acetone	22	J	18	ug/kg
R6AD1S		11/06/2002	Field Sample	309-00-2	Aldrin	2.9	U	2.9	ug/kg
R6AD1S		11/06/2002	Field Sample	319-84-6	alpha-BHC	2.9	U	2.9	ug/kg
R6AD1S		11/06/2002	Field Sample	5103-71-9	alpha-Chlordane	2.9	U	2.9	ug/kg
R6AD1S		11/06/2002	Field Sample	7429-90-5	Aluminum	6900		0.02	mg/kg
R6AD1S		11/06/2002	Field Sample	120-12-7	Anthracene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	7440-36-0	Antimony	3.4	U	3.4	mg/kg
R6AD1S		11/06/2002	Field Sample	7440-38-2	Arsenic	5.4	J	0.01	mg/kg
R6AD1S		11/06/2002	Field Sample	7440-39-3	Barium	140		0.94	mg/kg
R6AD1S		11/06/2002	Field Sample	71-43-2	Benzene	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	56-55-3	Benzo(a)anthracene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	50-32-8	Benzo(a)pyrene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	205-99-2	Benzo(b)fluoranthene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	191-24-2	Benzo(g,h,i)perylene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	207-08-9	Benzo(k)fluoranthene	37	J	10	ug/kg
R6AD1S		11/06/2002	Field Sample	85-68-7	Benzyl Butyl Phthalate	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	7440-41-7	Beryllium	0.47	J	0.004	mg/kg
R6AD1S		11/06/2002	Field Sample	319-85-7	beta-BHC	2.9	U	2.9	ug/kg
R6AD1S		11/06/2002	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	111-44-4	bis(2-Chloroethyl)ether	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	75-27-4	Bromodichloromethane	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	75-25-2	Bromoform	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	74-83-9	Bromomethane	8.8	U	8.8	ug/kg
R6AD1S		11/06/2002	Field Sample	7440-43-9	Cadmium	0.59	J	0.005	mg/kg
R6AD1S		11/06/2002	Field Sample	7440-70-2	Calcium	12000		1.1	mg/kg
R6AD1S		11/06/2002	Field Sample	86-74-8	Carbazole	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	75-15-0	Carbon Disulfide	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	56-23-5	Carbon Tetrachloride	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	108-90-7	Chlorobenzene	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	124-48-1	Chlorodibromomethane	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	75-00-3	Chloroethane	8.8	U	8.8	ug/kg
R6AD1S		11/06/2002	Field Sample	67-66-3	Chloroform	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	74-87-3	Chloromethane	8.8	UJ	8.8	ug/kg
R6AD1S		11/06/2002	Field Sample	7440-47-3	Chromium	14		0.01	mg/kg
R6AD1S		11/06/2002	Field Sample	218-01-9	Chrysene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	10061-01-5	cis-1,3-Dichloropropene	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	7440-48-4	Cobalt	7	J	0.01	mg/kg
R6AD1S		11/06/2002	Field Sample	7440-50-8	Copper	14		0.01	mg/kg
R6AD1S		11/06/2002	Field Sample	75-99-0	Dalapon	3400	U	3400	ug/kg
R6AD1S		11/06/2002	Field Sample	2051-24-3	Decachlorobiphenyl	29	U	29	ug/kg
R6AD1S		11/06/2002	Field Sample	319-86-8	delta-BHC	2.9	U	2.9	ug/kg
R6AD1S		11/06/2002	Field Sample	53-70-3	Dibenzo(a,h)anthracene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	132-64-9	Dibenzofuran	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	1918-00-9	Dicamba	34	U	34	ug/kg
R6AD1S		11/06/2002	Field Sample	C-DICHLOROBI	Dichlorobiphenyl	5.7	U	5.7	ug/kg
R6AD1S		11/06/2002	Field Sample	75-09-2	Dichloromethane	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	120-36-5	Dichlorprop	170	U	170	ug/kg
R6AD1S		11/06/2002	Field Sample	60-57-1	Dieldrin	5.7	U	5.7	ug/kg
R6AD1S		11/06/2002	Field Sample	84-66-2	Diethyl Phthalate	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	131-11-3	Dimethyl Phthalate	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	84-74-2	Di-n-butylphthalate	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	117-84-0	Di-n-octylphthalate	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	88-85-7	Dinoseb	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	959-98-8	Endosulfan I	2.9	U	2.9	ug/kg
R6AD1S		11/06/2002	Field Sample	33213-65-9	Endosulfan II	5.7	U	5.7	ug/kg
R6AD1S		11/06/2002	Field Sample	1031-07-8	Endosulfan Sulfate	5.7	U	5.7	ug/kg
R6AD1S		11/06/2002	Field Sample	72-20-8	Endrin	5.7	U	5.7	ug/kg
R6AD1S		11/06/2002	Field Sample	7421-93-4	Endrin Aldehyde	5.7	U	5.7	ug/kg
R6AD1S		11/06/2002	Field Sample	53494-70-5	Endrin Ketone	5.7	U	5.7	ug/kg
R6AD1S		11/06/2002	Field Sample	100-41-4	Ethylbenzene	2.2	J	0.83	ug/kg
R6AD1S		11/06/2002	Field Sample	206-44-0	Fluoranthene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	86-73-7	Fluorene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	58-89-9	gamma-BHC (Lindane)	2.9	U	2.9	ug/kg
R6AD1S		11/06/2002	Field Sample	5103-74-2	gamma-Chlordane	2.9	U	2.9	ug/kg
R6AD1S		11/06/2002	Field Sample	76-44-8	Heptachlor	2.9	U	2.9	ug/kg
R6AD1S		11/06/2002	Field Sample	1024-57-3	Heptachlor Epoxide	2.9	U	2.9	ug/kg
R6AD1S		11/06/2002	Field Sample	C-HEPTACHLOR	Heptachlorobiphenyl	17	U	17	ug/kg
R6AD1S		11/06/2002	Field Sample	118-74-1	Hexachlorobenzene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	C-HEXACHLORO	Hexachlorobiphenyl	12	U	12	ug/kg
R6AD1S		11/06/2002	Field Sample	87-68-3	Hexachlorobutadiene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	77-47-4	Hexachlorocyclopentadiene	570	U	570	ug/kg

Appendix II-B1
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
R6AD1S		11/06/2002	Field Sample	67-72-1	Hexachloroethane	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	7439-89-6	Iron	15000		0.05	mg/kg
R6AD1S		11/06/2002	Field Sample	78-59-1	Isophorone	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	7439-92-1	Lead	20		0.005	mg/kg
R6AD1S		11/06/2002	Field Sample	7439-95-4	Magnesium	3800		47	mg/kg
R6AD1S		11/06/2002	Field Sample	7439-96-5	Manganese	860		0.01	mg/kg
R6AD1S		11/06/2002	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	3400	U	3400	ug/kg
R6AD1S		11/06/2002	Field Sample	93-65-2	MCPP	3400	U	3400	ug/kg
R6AD1S		11/06/2002	Field Sample	7439-97-6	Mercury	0.036		0.017	mg/kg
R6AD1S		11/06/2002	Field Sample	72-43-5	Methoxychlor	29	UJ	29	ug/kg
R6AD1S		11/06/2002	Field Sample	591-78-6	Methyl N-Butyl Ketone	22	U	22	ug/kg
R6AD1S		11/06/2002	Field Sample	C-MONOCHLOR(	Monochlorobiphenyl	5.7	U	5.7	ug/kg
R6AD1S		11/06/2002	Field Sample	91-20-3	Naphthalene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	7440-02-0	Nickel	15		0.04	mg/kg
R6AD1S		11/06/2002	Field Sample	98-95-3	Nitrobenzene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	86-30-6	N-Nitrosodiphenylamine	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	C-NONACHLORC	Nonachlorobiphenyl	29	U	29	ug/kg
R6AD1S		11/06/2002	Field Sample	C-OCTA-BIPHE	Octachlorobiphenyl	17	U	17	ug/kg
R6AD1S		11/06/2002	Field Sample	106-47-8	P-Chloroaniline	1100	U	1100	ug/kg
R6AD1S		11/06/2002	Field Sample	C-PENTBIPHEN	Pentachlorobiphenyl	12	U	12	ug/kg
R6AD1S		11/06/2002	Field Sample	87-86-5	Pentachlorophenol	29	U	29	ug/kg
R6AD1S		11/06/2002	Field Sample	PH	pH	7.5		1	units
R6AD1S		11/06/2002	Field Sample	85-01-8	Phenanthrene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	108-95-2	Phenol	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	100-01-6	P-Nitroaniline	2900	U	2900	ug/kg
R6AD1S		11/06/2002	Field Sample	7440-09-7	Potassium	840		94	mg/kg
R6AD1S		11/06/2002	Field Sample	129-00-0	Pyrene	570	U	570	ug/kg
R6AD1S		11/06/2002	Field Sample	7782-49-2	Selenium	1.7	U	1.7	mg/kg
R6AD1S		11/06/2002	Field Sample	7440-22-4	Silver	1.7	U	1.7	mg/kg
R6AD1S		11/06/2002	Field Sample	7440-23-5	Sodium	220	U	220	mg/kg
R6AD1S		11/06/2002	Field Sample	100-42-5	Styrene (Monomer)	4.4	UJ	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	C-TETRACHLOR	Tetrachlorobiphenyl	12	U	12	ug/kg
R6AD1S		11/06/2002	Field Sample	127-18-4	Tetrachloroethene	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	7440-28-0	Thallium	1.7	U	1.7	mg/kg
R6AD1S		11/06/2002	Field Sample	108-88-3	Toluene	2.7	J	1	ug/kg
R6AD1S		11/06/2002	Field Sample	E-10195	Total Organic Carbon	6600		500	mg/kg
R6AD1S		11/06/2002	Field Sample	8001-35-2	Toxaphene	290	U	290	ug/kg
R6AD1S		11/06/2002	Field Sample	10061-02-6	trans-1,3-Dichloropropene	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	C-TRICHLOROB	Trichlorobiphenyl	5.7	U	5.7	ug/kg
R6AD1S		11/06/2002	Field Sample	79-01-6	Trichloroethylene	4.4	U	4.4	ug/kg
R6AD1S		11/06/2002	Field Sample	7440-62-2	Vanadium	18		0.01	mg/kg
R6AD1S		11/06/2002	Field Sample	75-01-4	Vinyl chloride	8.8	U	8.8	ug/kg
R6AD1S		11/06/2002	Field Sample	1330-20-7	Xylenes, Total	12		11	ug/kg
R6AD1S		11/06/2002	Field Sample	7440-66-6	Zinc	110		0.02	mg/kg

Appendix II-B2

Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	71-55-6	1,1,1-Trichloroethane	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	79-00-5	1,1,2-Trichloroethane	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	75-34-3	1,1-Dichloroethane	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	75-35-4	1,1-Dichloroethylene	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	120-82-1	1,2,4-Trichlorobenzene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	95-50-1	1,2-Dichlorobenzene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	107-06-2	1,2-Dichloroethane	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	540-59-0	1,2-Dichloroethene (total)	9.6	U	9.6	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	78-87-5	1,2-Dichloropropane	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	541-73-1	1,3-Dichlorobenzene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	106-46-7	1,4-Dichlorobenzene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	93-76-5	2,4,5-T	9.7	U	9.7	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	93-72-1	2,4,5-TP (Silvex)	9.7	U	9.7	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	95-95-4	2,4,5-Trichlorophenol	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	88-06-2	2,4,6-Trichlorophenol	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	94-75-7	2,4-D	9.7	U	9.7	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	94-82-6	2,4-DB	9.7	U	9.7	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	120-83-2	2,4-Dichlorophenol	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	105-67-9	2,4-Dimethylphenol	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	51-28-5	2,4-Dinitrophenol	2000	U	2000	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	121-14-2	2,4-Dinitrotoluene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	606-20-2	2,6-Dinitrotoluene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	78-93-3	2-Butanone (MEK)	24	U	24	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	91-58-7	2-Chloronaphthalene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	95-57-8	2-Chlorophenol	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	91-57-6	2-Methylnaphthalene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	88-74-4	2-Nitroaniline	2000	U	2000	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	88-75-5	2-Nitrophenol	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	65794-96-9	3 & 4 Methylphenol	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	91-94-1	3,3'-Dichlorobenzidine	770	U	770	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	99-09-2	3-Nitroaniline	2000	U	2000	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	72-54-8	4,4'-DDD	3.9	UJ	3.9	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	72-55-9	4,4'-DDE	3.9	UJ	3.9	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	50-29-3	4,4'-DDT	3.9	UJ	3.9	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2000	U	2000	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	59-50-7	4-Chloro-3-methylphenol	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	24	U	24	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	100-02-7	4-Nitrophenol	2000	U	2000	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	83-32-9	Acenaphthene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	208-96-8	Acenaphthylene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	67-64-1	Acetone	48	U	48	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	309-00-2	Aldrin	2	UJ	2	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	319-84-6	alpha-BHC	2	UJ	2	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	5103-71-9	alpha-Chlordane	2	UJ	2	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7429-90-5	Aluminum	1000		22	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	120-12-7	Anthracene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-36-0	Antimony	2.2	U	2.2	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-38-2	Arsenic	1.2		1.1	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-39-3	Barium	27		1.1	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	71-43-2	Benzene	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	56-55-3	Benzo(a)anthracene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	50-32-8	Benzo(a)pyrene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	205-99-2	Benzo(b)fluoranthene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	191-24-2	Benzo(g,h,i)perylene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	207-08-9	Benzo(k)fluoranthene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	85-68-7	Benzyl Butyl Phthalate	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-41-7	Beryllium	0.073	J	0.43	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	319-85-7	beta-BHC	2	UJ	2	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	75-27-4	Bromodichloromethane	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	75-25-2	Bromoform	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	74-83-9	Bromomethane	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-43-9	Cadmium	0.54	U	0.54	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-70-2	Calcium	1700		54	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	86-74-8	Carbazole	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	75-15-0	Carbon Disulfide	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	56-23-5	Carbon Tetrachloride	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	108-90-7	Chlorobenzene	2.4	J	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	124-48-1	Chlorodibromomethane	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	75-00-3	Chloroethane	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	67-66-3	Chloroform	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	74-87-3	Chloromethane	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-47-3	Chromium	2.5		1.1	mg/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	218-01-9	Chrysene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	156-59-2	cis-1,2-Dichloroethene	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	10061-01-5	cis-1,3-Dichloropropene	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-48-4	Cobalt	2.1		1.1	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-50-8	Copper	0.63	J	2.2	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	75-99-0	Dalapon	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	319-86-8	delta-BHC	2	UJ	2	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	53-70-3	Dibenzo(a,h)anthracene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	132-64-9	Dibenzofuran	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	1918-00-9	Dicamba	9.7	U	9.7	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	75-09-2	Dichloromethane	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	60-57-1	Dieldrin	3.9	UJ	3.9	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	84-66-2	Diethyl Phthalate	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	131-11-3	Dimethyl Phthalate	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	84-74-2	Di-n-butylphthalate	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	117-84-0	Di-n-octylphthalate	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	88-85-7	Dinoseb	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	959-98-8	Endosulfan I	2	UJ	2	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	33213-65-9	Endosulfan II	3.9	UJ	3.9	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	1031-07-8	Endosulfan Sulfate	3.9	UJ	3.9	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	72-20-8	Endrin	3.9	UJ	3.9	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7421-93-4	Endrin Aldehyde	3.9	UJ	3.9	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	53494-70-5	Endrin Ketone	3.9	UJ	3.9	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	100-41-4	Ethylbenzene	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	206-44-0	Fluoranthene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	86-73-7	Fluorene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	58-89-9	gamma-BHC (Lindane)	2	UJ	2	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	5103-74-2	gamma-Chlordane	2	UJ	2	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	76-44-8	Heptachlor	2	UJ	2	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	1024-57-3	Heptachlor Epoxide	2	UJ	2	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	118-74-1	Hexachlorobenzene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	87-68-3	Hexachlorobutadiene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	77-47-4	Hexachlorocyclopentadiene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	67-72-1	Hexachloroethane	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7439-89-6	Iron	3200		5.4	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	78-59-1	Isophorone	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7439-92-1	Lead	2.3		0.54	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7439-95-4	Magnesium	840		54	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7439-96-5	Manganese	200		1.1	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	U	2300	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	93-65-2	MCPP	2300	U	2300	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7439-97-6	Mercury	0.029		0.021	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	72-43-5	Methoxychlor	20	UJ	20	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	591-78-6	Methyl N-Butyl Ketone	24	U	24	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	91-20-3	Naphthalene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-02-0	Nickel	3.9	J	4.3	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	98-95-3	Nitrobenzene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	86-30-6	N-Nitrosodiphenylamine	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	106-47-8	P-Chloroaniline	37	J	770	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	87-86-5	Pentachlorophenol	9.7	U	9.7	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	85-01-8	Phenanthrene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	108-95-2	Phenol	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	100-01-6	P-Nitroaniline	2000	U	2000	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-09-7	Potassium	200	B	110	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	129-00-0	Pyrene	390	U	390	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7782-49-2	Selenium	2.7	U	2.7	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-22-4	Silver	1.1	U	1.1	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-23-5	Sodium	150	U	150	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	100-42-5	Styrene (Monomer)	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	127-18-4	Tetrachloroethene	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-28-0	Thallium	2.7	U	2.7	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	108-88-3	Toluene	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	8001-35-2	Toxaphene	200	UJ	200	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	156-60-5	trans-1,2-Dichloroethene	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	10061-02-6	trans-1,3-Dichloropropene	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	79-01-6	Trichloroethene	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-62-2	Vanadium	4.1		1.1	mg/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	75-01-4	Vinyl chloride	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	1330-20-7	Xylenes, Total	9.6	U	9.6	ug/Kg
SED-SA2-GMCS-PDA9A		9/22/2005	Field Sample	7440-66-6	Zinc	43		2.2	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	71-55-6	1,1,1-Trichloroethane	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	79-00-5	1,1,2-Trichloroethane	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	75-34-3	1,1-Dichloroethane	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	75-35-4	1,1-Dichloroethylene	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	120-82-1	1,2,4-Trichlorobenzene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	95-50-1	1,2-Dichlorobenzene	400	U	400	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	107-06-2	1,2-Dichloroethane	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	540-59-0	1,2-Dichloroethene (total)	11	U	11	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	78-87-5	1,2-Dichloropropane	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	541-73-1	1,3-Dichlorobenzene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	106-46-7	1,4-Dichlorobenzene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	93-76-5	2,4,5-T	10	U	10	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	95-95-4	2,4,5-Trichlorophenol	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	88-06-2	2,4,6-Trichlorophenol	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	94-75-7	2,4-D	10	U	10	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	94-82-6	2,4-DB	10	U	10	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	120-83-2	2,4-Dichlorophenol	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	105-67-9	2,4-Dimethylphenol	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	51-28-5	2,4-Dinitrophenol	2100	U	2100	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	121-14-2	2,4-Dinitrotoluene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	606-20-2	2,6-Dinitrotoluene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	78-93-3	2-Butanone (MEK)	27	U	27	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	91-58-7	2-Chloronaphthalene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	95-57-8	2-Chlorophenol	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	91-57-6	2-Methylnaphthalene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	88-74-4	2-Nitroaniline	2100	U	2100	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	88-75-5	2-Nitrophenol	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	65794-96-9	3 & 4 Methylphenol	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	91-94-1	3,3'-Dichlorobenzidine	800	U	800	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	99-09-2	3-Nitroaniline	2100	U	2100	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	72-54-8	4,4'-DDD	4	UJ	4	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	72-55-9	4,4'-DDE	4	UJ	4	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	50-29-3	4,4'-DDT	4	UJ	4	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2100	U	2100	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	59-50-7	4-Chloro-3-methylphenol	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	27	U	27	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	100-02-7	4-Nitrophenol	2100	U	2100	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	83-32-9	Acenaphthene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	208-96-8	Acenaphthylene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	67-64-1	Acetone	55	U	55	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	309-00-2	Aldrin	2.1	UJ	2.1	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	319-84-6	alpha-BHC	2.1	UJ	2.1	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	5103-71-9	alpha-Chlordane	2.1	UJ	2.1	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7429-90-5	Aluminum	900		23	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	120-12-7	Anthracene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-36-0	Antimony	2.3	U	2.3	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-38-2	Arsenic	2		1.1	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-39-3	Barium	22		1.1	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	71-43-2	Benzene	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	56-55-3	Benzo(a)anthracene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	50-32-8	Benzo(a)pyrene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	205-99-2	Benzo(b)fluoranthene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	191-24-2	Benzo(g,h,i)perylene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	207-08-9	Benzo(k)fluoranthene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	85-68-7	Benzyl Butyl Phthalate	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-41-7	Beryllium	0.098	J	0.46	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	319-85-7	beta-BHC	2.1	UJ	2.1	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	75-27-4	Bromodichloromethane	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	75-25-2	Bromoform	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	74-83-9	Bromomethane	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-43-9	Cadmium	0.57	U	0.57	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-70-2	Calcium	1800	J	57	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	86-74-8	Carbazole	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	75-15-0	Carbon Disulfide	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	56-23-5	Carbon Tetrachloride	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	108-90-7	Chlorobenzene	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	124-48-1	Chlorodibromomethane	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	75-00-3	Chloroethane	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	67-66-3	Chloroform	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	74-87-3	Chloromethane	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-47-3	Chromium	2.6		1.1	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	218-01-9	Chrysene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	156-59-2	cis-1,2-Dichloroethene	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	10061-01-5	cis-1,3-Dichloropropene	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-48-4	Cobalt	2.6		1.1	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-50-8	Copper	0.67	J	2.3	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	75-99-0	Dalapon	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	319-86-8	delta-BHC	2.1	UJ	2.1	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	53-70-3	Dibenzo(a,h)anthracene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	132-64-9	Dibenzofuran	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	1918-00-9	Dicamba	10	U	10	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	75-09-2	Dichloromethane	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	60-57-1	Dieldrin	4	UJ	4	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	84-66-2	Diethyl Phthalate	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	131-11-3	Dimethyl Phthalate	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	84-74-2	Di-n-butylphthalate	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	117-84-0	Di-n-octylphthalate	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	88-85-7	Dinoseb	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	959-98-8	Endosulfan I	2.1	UJ	2.1	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	33213-65-9	Endosulfan II	4	UJ	4	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	1031-07-8	Endosulfan Sulfate	4	UJ	4	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	72-20-8	Endrin	4	UJ	4	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7421-93-4	Endrin Aldehyde	4	UJ	4	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	53494-70-5	Endrin Ketone	4	UJ	4	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	100-41-4	Ethylbenzene	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	206-44-0	Fluoranthene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	86-73-7	Fluorene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	58-89-9	gamma-BHC (Lindane)	2.1	UJ	2.1	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	5103-74-2	gamma-Chlordane	2.1	UJ	2.1	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	76-44-8	Heptachlor	2.1	UJ	2.1	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	1024-57-3	Heptachlor Epoxide	2.1	UJ	2.1	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	118-74-1	Hexachlorobenzene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	87-68-3	Hexachlorobutadiene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	77-47-4	Hexachlorocyclopentadiene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	67-72-1	Hexachloroethane	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7439-89-6	Iron	3200		5.7	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	78-59-1	Isophorone	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7439-92-1	Lead	2		0.57	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7439-95-4	Magnesium	710	J	57	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7439-96-5	Manganese	110	J	1.1	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2400	U	2400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	93-65-2	MCPP	2400	U	2400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7439-97-6	Mercury	0.022	U	0.022	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	72-43-5	Methoxychlor	21	UJ	21	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	591-78-6	Methyl N-Butyl Ketone	27	U	27	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	91-20-3	Naphthalene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-02-0	Nickel	6.1		4.6	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	98-95-3	Nitrobenzene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	86-30-6	N-Nitrosodiphenylamine	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	106-47-8	P-Chloroaniline	39	J	800	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	87-86-5	Pentachlorophenol	10	U	10	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	85-01-8	Phenanthrene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	108-95-2	Phenol	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	100-01-6	P-Nitroaniline	2100	U	2100	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-09-7	Potassium	160	B	110	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	129-00-0	Pyrene	400	U	400	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7782-49-2	Selenium	2.9	U	2.9	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-22-4	Silver	1.1	U	1.1	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-23-5	Sodium	140	U	140	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	100-42-5	Styrene (Monomer)	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	127-18-4	Tetrachloroethene	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-28-0	Thallium	2.9	U	2.9	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	108-88-3	Toluene	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	8001-35-2	Toxaphene	210	UJ	210	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	156-60-5	trans-1,2-Dichloroethene	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	10061-02-6	trans-1,3-Dichloropropene	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	79-01-6	Trichloroethene	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-62-2	Vanadium	3.2	J	1.1	mg/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	75-01-4	Vinyl chloride	5.5	U	5.5	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	1330-20-7	Xylenes, Total	11	U	11	ug/Kg
SED-SA2-GMCS-PDA9		9/22/2005	Field Sample	7440-66-6	Zinc	8.2		2.3	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	71-55-6	1,1,1-Trichloroethane	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	79-00-5	1,1,2-Trichloroethane	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	75-34-3	1,1-Dichloroethane	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	75-35-4	1,1-Dichloroethylene	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	120-82-1	1,2,4-Trichlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	95-50-1	1,2-Dichlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	107-06-2	1,2-Dichloroethane	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	540-59-0	1,2-Dichloroethene (total)	9.5	U	9.5	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	78-87-5	1,2-Dichloropropane	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	541-73-1	1,3-Dichlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	106-46-7	1,4-Dichlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	380	U	380	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	93-76-5	2,4,5-T	9.6	U	9.6	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	93-72-1	2,4,5-TP (Silvex)	9.6	U	9.6	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	95-95-4	2,4,5-Trichlorophenol	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	88-06-2	2,4,6-Trichlorophenol	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	94-75-7	2,4-D	9.6	U	9.6	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	94-82-6	2,4-DB	9.6	U	9.6	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	120-83-2	2,4-Dichlorophenol	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	105-67-9	2,4-Dimethylphenol	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	51-28-5	2,4-Dinitrophenol	2000	U	2000	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	121-14-2	2,4-Dinitrotoluene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	606-20-2	2,6-Dinitrotoluene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	78-93-3	2-Butanone (MEK)	24	U	24	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	91-58-7	2-Chloronaphthalene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	95-57-8	2-Chlorophenol	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	91-57-6	2-Methylnaphthalene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	88-74-4	2-Nitroaniline	2000	U	2000	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	88-75-5	2-Nitrophenol	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	65794-96-9	3 & 4 Methylphenol	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	91-94-1	3,3'-Dichlorobenzidine	760	U	760	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	99-09-2	3-Nitroaniline	2000	U	2000	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	72-54-8	4,4'-DDD	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	72-55-9	4,4'-DDE	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	50-29-3	4,4'-DDT	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2000	U	2000	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	59-50-7	4-Chloro-3-methylphenol	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	24	U	24	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	100-02-7	4-Nitrophenol	2000	U	2000	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	83-32-9	Acenaphthene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	208-96-8	Acenaphthylene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	67-64-1	Acetone	47	U	47	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	309-00-2	Aldrin	2	U	2	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	319-84-6	alpha-BHC	2	U	2	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	5103-71-9	alpha-Chlordane	2	U	2	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7429-90-5	Aluminum	2000		21	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	120-12-7	Anthracene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-36-0	Antimony	2.1	U	2.1	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-38-2	Arsenic	2.3		1.1	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-39-3	Barium	49		1.1	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	71-43-2	Benzene	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	56-55-3	Benzo(a)anthracene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	50-32-8	Benzo(a)pyrene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	205-99-2	Benzo(b)fluoranthene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	191-24-2	Benzo(g,h,i)perylene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	207-08-9	Benzo(k)fluoranthene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	85-68-7	Benzyl Butyl Phthalate	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-41-7	Beryllium	0.11	J	0.43	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	319-85-7	beta-BHC	2	U	2	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	75-27-4	Bromodichloromethane	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	75-25-2	Bromoform	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	74-83-9	Bromomethane	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-43-9	Cadmium	1.5		0.54	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-70-2	Calcium	2000		54	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	86-74-8	Carbazole	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	75-15-0	Carbon Disulfide	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	56-23-5	Carbon Tetrachloride	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	108-90-7	Chlorobenzene	7.6		4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	124-48-1	Chlorodibromomethane	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	75-00-3	Chloroethane	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	67-66-3	Chloroform	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	74-87-3	Chloromethane	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-47-3	Chromium	4.4		1.1	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	218-01-9	Chrysene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	156-59-2	cis-1,2-Dichloroethene	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	10061-01-5	cis-1,3-Dichloropropene	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-48-4	Cobalt	5.1		1.1	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-50-8	Copper	8		2.1	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	75-99-0	Dalapon	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	319-86-8	delta-BHC	2	U	2	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	53-70-3	Dibenzo(a,h)anthracene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	132-64-9	Dibenzofuran	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	1918-00-9	Dicamba	9.6	U	9.6	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	75-09-2	Dichloromethane	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	60-57-1	Dieldrin	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	84-66-2	Diethyl Phthalate	380	U	380	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	131-11-3	Dimethyl Phthalate	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	84-74-2	Di-n-butylphthalate	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	117-84-0	Di-n-octylphthalate	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	88-85-7	Dinoseb	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	959-98-8	Endosulfan I	2	U	2	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	33213-65-9	Endosulfan II	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	1031-07-8	Endosulfan Sulfate	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	72-20-8	Endrin	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7421-93-4	Endrin Aldehyde	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	53494-70-5	Endrin Ketone	3.8	UJ	3.8	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	100-41-4	Ethylbenzene	1.1	J	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	206-44-0	Fluoranthene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	86-73-7	Fluorene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	58-89-9	gamma-BHC (Lindane)	2	U	2	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	5103-74-2	gamma-Chlordane	2	U	2	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	76-44-8	Heptachlor	2	U	2	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	1024-57-3	Heptachlor Epoxide	2	U	2	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	118-74-1	Hexachlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	87-68-3	Hexachlorobutadiene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	77-47-4	Hexachlorocyclopentadiene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	67-72-1	Hexachloroethane	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7439-89-6	Iron	6400		5.4	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	78-59-1	Isophorone	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7439-92-1	Lead	7.6		0.54	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7439-95-4	Magnesium	1000		54	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7439-96-5	Manganese	140		1.1	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	U	2300	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	93-65-2	MCPP	2300	U	2300	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7439-97-6	Mercury	0.0066	J	0.02	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	72-43-5	Methoxychlor	20	U	20	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	591-78-6	Methyl N-Butyl Ketone	24	U	24	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	91-20-3	Naphthalene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-02-0	Nickel	11		4.3	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	98-95-3	Nitrobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	86-30-6	N-Nitrosodiphenylamine	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	106-47-8	P-Chloroaniline	33	J	760	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	87-86-5	Pentachlorophenol	9.6	U	9.6	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	85-01-8	Phenanthrene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	108-95-2	Phenol	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	100-01-6	P-Nitroaniline	2000	U	2000	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-09-7	Potassium	190	B	110	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	129-00-0	Pyrene	380	U	380	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7782-49-2	Selenium	2.7	U	2.7	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-22-4	Silver	1.1	U	1.1	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-23-5	Sodium	270	U	270	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	100-42-5	Styrene (Monomer)	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	127-18-4	Tetrachloroethene	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-28-0	Thallium	2.7	U	2.7	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	108-88-3	Toluene	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	8001-35-2	Toxaphene	200	U	200	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	156-60-5	trans-1,2-Dichloroethene	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	10061-02-6	trans-1,3-Dichloropropene	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	79-01-6	Trichloroethene	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-62-2	Vanadium	7.4		1.1	mg/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	75-01-4	Vinyl chloride	4.7	U	4.7	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	1330-20-7	Xylenes, Total	9.5	U	9.5	ug/Kg
SED-SA2-GMCS-PDA5		9/22/2005	Field Sample	7440-66-6	Zinc	510		2.1	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	71-55-6	1,1,1-Trichloroethane	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	79-00-5	1,1,2-Trichloroethane	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	75-34-3	1,1-Dichloroethane	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	75-35-4	1,1-Dichloroethylene	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	120-82-1	1,2,4-Trichlorobenzene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	95-50-1	1,2-Dichlorobenzene	240	J	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	107-06-2	1,2-Dichloroethane	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	540-59-0	1,2-Dichloroethene (total)	21	U	21	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	78-87-5	1,2-Dichloropropane	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	541-73-1	1,3-Dichlorobenzene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	106-46-7	1,4-Dichlorobenzene	200	J	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	93-76-5	2,4,5-T	18	U	18	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	93-72-1	2,4,5-TP (Silvex)	18	U	18	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	95-95-4	2,4,5-Trichlorophenol	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	88-06-2	2,4,6-Trichlorophenol	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	94-75-7	2,4-D	120	J	18	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	94-82-6	2,4-DB	18	U	18	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	120-83-2	2,4-Dichlorophenol	720	U	720	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	105-67-9	2,4-Dimethylphenol	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	51-28-5	2,4-Dinitrophenol	3700	U	3700	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	121-14-2	2,4-Dinitrotoluene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	606-20-2	2,6-Dinitrotoluene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	78-93-3	2-Butanone (MEK)	53	U	53	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	91-58-7	2-Chloronaphthalene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	95-57-8	2-Chlorophenol	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	91-57-6	2-Methylnaphthalene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	88-74-4	2-Nitroaniline	3700	U	3700	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	88-75-5	2-Nitrophenol	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	65794-96-9	3 & 4 Methylphenol	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	91-94-1	3,3'-Dichlorobenzidine	1400	U	1400	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	99-09-2	3-Nitroaniline	3700	U	3700	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	72-54-8	4,4'-DDD	73	U	73	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	72-55-9	4,4'-DDE	73	U	73	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	50-29-3	4,4'-DDT	73	U	73	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	3700	U	3700	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	59-50-7	4-Chloro-3-methylphenol	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	53	U	53	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	100-02-7	4-Nitrophenol	3700	U	3700	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	83-32-9	Acenaphthene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	208-96-8	Acenaphthylene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	67-64-1	Acetone	110	U	110	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	309-00-2	Aldrin	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	319-84-6	alpha-BHC	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	5103-71-9	alpha-Chlordane	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7429-90-5	Aluminum	12000		42	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	120-12-7	Anthracene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-36-0	Antimony	4.2	U	4.2	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-38-2	Arsenic	6.7		2.1	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-39-3	Barium	180		2.1	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	71-43-2	Benzene	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	56-55-3	Benzo(a)anthracene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	50-32-8	Benzo(a)pyrene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	205-99-2	Benzo(b)fluoranthene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	191-24-2	Benzo(g,h,i)perylene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	207-08-9	Benzo(k)fluoranthene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	85-68-7	Benzyl Butyl Phthalate	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-41-7	Beryllium	0.65	J	0.85	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	319-85-7	beta-BHC	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	75-27-4	Bromodichloromethane	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	75-25-2	Bromoform	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	74-83-9	Bromomethane	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-43-9	Cadmium	0.57	J	1.1	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-70-2	Calcium	11000		110	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	86-74-8	Carbazole	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	75-15-0	Carbon Disulfide	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	56-23-5	Carbon Tetrachloride	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	108-90-7	Chlorobenzene	78	J	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	124-48-1	Chlorodibromomethane	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	75-00-3	Chloroethane	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	67-66-3	Chloroform	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	74-87-3	Chloromethane	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-47-3	Chromium	17		2.1	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	218-01-9	Chrysene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	156-59-2	cis-1,2-Dichloroethene	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	10061-01-5	cis-1,3-Dichloropropene	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-48-4	Cobalt	7.7		2.1	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-50-8	Copper	18		4.2	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	75-99-0	Dalapon	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	319-86-8	delta-BHC	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	53-70-3	Dibenzo(a,h)anthracene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	132-64-9	Dibenzofuran	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	1918-00-9	Dicamba	18	U	18	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	75-09-2	Dichloromethane	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	120-36-5	Dichlorprop	31	J	220	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	60-57-1	Dieldrin	73	U	73	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	84-66-2	Diethyl Phthalate	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	131-11-3	Dimethyl Phthalate	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	84-74-2	Di-n-butylphthalate	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	117-84-0	Di-n-octylphthalate	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	88-85-7	Dinoseb	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	959-98-8	Endosulfan I	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	33213-65-9	Endosulfan II	73	U	73	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	1031-07-8	Endosulfan Sulfate	73	U	73	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	72-20-8	Endrin	73	U	73	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7421-93-4	Endrin Aldehyde	73	U	73	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	53494-70-5	Endrin Ketone	73	UJ	73	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	100-41-4	Ethylbenzene	2.1	J	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	206-44-0	Fluoranthene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	86-73-7	Fluorene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	58-89-9	gamma-BHC (Lindane)	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	5103-74-2	gamma-Chlordane	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	76-44-8	Heptachlor	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	1024-57-3	Heptachlor Epoxide	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	118-74-1	Hexachlorobenzene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	87-68-3	Hexachlorobutadiene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	77-47-4	Hexachlorocyclopentadiene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	67-72-1	Hexachloroethane	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7439-89-6	Iron	17000		11	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	78-59-1	Isophorone	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7439-92-1	Lead	20		1.1	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7439-95-4	Magnesium	4100		110	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7439-96-5	Manganese	770		2.1	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	4400	U	4400	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	93-65-2	MCPP	4400	U	4400	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7439-97-6	Mercury	0.046		0.037	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	72-43-5	Methoxychlor	370	U	370	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	591-78-6	Methyl N-Butyl Ketone	53	U	53	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	91-20-3	Naphthalene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-02-0	Nickel	19		8.5	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	98-95-3	Nitrobenzene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	86-30-6	N-Nitrosodiphenylamine	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	106-47-8	P-Chloroaniline	500	J	1400	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	87-86-5	Pentachlorophenol	18	U	18	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	85-01-8	Phenanthrene	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	108-95-2	Phenol	720	U	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	100-01-6	P-Nitroaniline	3700	U	3700	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-09-7	Potassium	1700	B	210	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	129-00-0	Pyrene	45	J	720	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7782-49-2	Selenium	5.3	U	5.3	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-22-4	Silver	2.1	U	2.1	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-23-5	Sodium	360	U	360	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	100-42-5	Styrene (Monomer)	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	127-18-4	Tetrachloroethene	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-28-0	Thallium	5.3	U	5.3	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	108-88-3	Toluene	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	8001-35-2	Toxaphene	3700	U	3700	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	156-60-5	trans-1,2-Dichloroethene	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	10061-02-6	trans-1,3-Dichloropropene	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	79-01-6	Trichloroethene	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-62-2	Vanadium	28		2.1	mg/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	75-01-4	Vinyl chloride	11	U	11	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	1330-20-7	Xylenes, Total	21	U	21	ug/Kg
SED-SA2-GMCS-PDA2		9/22/2005	Field Sample	7440-66-6	Zinc	210		4.2	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	71-55-6	1,1,1-Trichloroethane	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	79-34-5	1,1,2,2-Tetrachloroethane	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	79-00-5	1,1,2-Trichloroethane	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	75-34-3	1,1-Dichloroethane	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	75-35-4	1,1-Dichloroethylene	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	120-82-1	1,2,4-Trichlorobenzene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	95-50-1	1,2-Dichlorobenzene	180	J	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	107-06-2	1,2-Dichloroethane	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	540-59-0	1,2-Dichloroethene (total)	30	U	30	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	78-87-5	1,2-Dichloropropane	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	541-73-1	1,3-Dichlorobenzene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	106-46-7	1,4-Dichlorobenzene	160	J	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	93-76-5	2,4,5-T	18	U	18	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	93-72-1	2,4,5-TP (Silvex)	18	U	18	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	95-95-4	2,4,5-Trichlorophenol	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	88-06-2	2,4,6-Trichlorophenol	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	94-75-7	2,4-D	51	J	18	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	94-82-6	2,4-DB	18	U	18	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	120-83-2	2,4-Dichlorophenol	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	105-67-9	2,4-Dimethylphenol	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	51-28-5	2,4-Dinitrophenol	3700	UJ	3700	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	121-14-2	2,4-Dinitrotoluene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	606-20-2	2,6-Dinitrotoluene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	78-93-3	2-Butanone (MEK)	75	U	75	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	91-58-7	2-Chloronaphthalene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	95-57-8	2-Chlorophenol	710	UJ	710	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	91-57-6	2-Methylnaphthalene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	95-48-7	2-Methylphenol (o-Cresol)	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	88-74-4	2-Nitroaniline	3700	UJ	3700	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	88-75-5	2-Nitrophenol	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	65794-96-9	3 & 4 Methylphenol	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	91-94-1	3,3'-Dichlorobenzidine	1400	UJ	1400	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	99-09-2	3-Nitroaniline	3700	UJ	3700	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	72-54-8	4,4'-DDD	71	U	71	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	72-55-9	4,4'-DDE	71	U	71	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	50-29-3	4,4'-DDT	71	U	71	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	534-52-1	4,6-Dinitro-2-methylphenol	3700	UJ	3700	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	101-55-3	4-Bromophenyl Phenyl Ether	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	59-50-7	4-Chloro-3-methylphenol	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7005-72-3	4-Chlorophenyl Phenyl Ether	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	108-10-1	4-Methyl-2-pentanone (MIBK)	75	U	75	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	100-02-7	4-Nitrophenol	3700	UJ	3700	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	83-32-9	Acenaphthene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	208-96-8	Acenaphthylene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	67-64-1	Acetone	25	J	150	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	309-00-2	Aldrin	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	319-84-6	alpha-BHC	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	5103-71-9	alpha-Chlordane	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7429-90-5	Aluminum	12000		40	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	120-12-7	Anthracene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-36-0	Antimony	4	U	4	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-38-2	Arsenic	5.9		2	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-39-3	Barium	160		2	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	71-43-2	Benzene	4.9	J	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	56-55-3	Benzo(a)anthracene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	50-32-8	Benzo(a)pyrene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	205-99-2	Benzo(b)fluoranthene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	191-24-2	Benzo(g,h,i)perylene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	207-08-9	Benzo(k)fluoranthene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	85-68-7	Benzyl Butyl Phthalate	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-41-7	Beryllium	0.65	J	0.8	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	319-85-7	beta-BHC	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	111-91-1	bis(2-Chloroethoxy)methane	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	117-81-7	bis(2-Ethylhexyl)phthalate	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	75-27-4	Bromodichloromethane	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	75-25-2	Bromoform	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	74-83-9	Bromomethane	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-43-9	Cadmium	0.53	J	1	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-70-2	Calcium	11000		100	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	86-74-8	Carbazole	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	75-15-0	Carbon Disulfide	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	56-23-5	Carbon Tetrachloride	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	108-90-7	Chlorobenzene	450		15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	124-48-1	Chlorodibromomethane	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	75-00-3	Chloroethane	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	67-66-3	Chloroform	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	74-87-3	Chloromethane	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-47-3	Chromium	17		2	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	218-01-9	Chrysene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	156-59-2	cis-1,2-Dichloroethene	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	10061-01-5	cis-1,3-Dichloropropene	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-48-4	Cobalt	7.5		2	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-50-8	Copper	18		4	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	75-99-0	Dalapon	710	U	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	319-86-8	delta-BHC	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	53-70-3	Dibenzo(a,h)anthracene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	132-64-9	Dibenzofuran	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	1918-00-9	Dicamba	18	U	18	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	75-09-2	Dichloromethane	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	120-36-5	Dichlorprop	19	J	220	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	60-57-1	Dieldrin	71	U	71	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	84-66-2	Diethyl Phthalate	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	131-11-3	Dimethyl Phthalate	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	84-74-2	Di-n-butylphthalate	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	117-84-0	Di-n-octylphthalate	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	88-85-7	Dinoseb	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	959-98-8	Endosulfan I	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	33213-65-9	Endosulfan II	71	U	71	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	1031-07-8	Endosulfan Sulfate	71	U	71	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	72-20-8	Endrin	71	U	71	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7421-93-4	Endrin Aldehyde	71	U	71	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	53494-70-5	Endrin Ketone	71	UJ	71	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	100-41-4	Ethylbenzene	3.1	J	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	206-44-0	Fluoranthene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	86-73-7	Fluorene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	58-89-9	gamma-BHC (Lindane)	37	U	37	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	5103-74-2	gamma-Chlordane	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	76-44-8	Heptachlor	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	1024-57-3	Heptachlor Epoxide	37	U	37	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	118-74-1	Hexachlorobenzene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	87-68-3	Hexachlorobutadiene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	77-47-4	Hexachlorocyclopentadiene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	67-72-1	Hexachloroethane	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	193-39-5	Indeno(1,2,3-cd)pyrene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7439-89-6	Iron	17000		10	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	78-59-1	Isophorone	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7439-92-1	Lead	21		1	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7439-95-4	Magnesium	4200		100	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7439-96-5	Manganese	760		2	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	4300	U	4300	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	93-65-2	MCPP	4300	U	4300	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7439-97-6	Mercury	0.04	J	0.04	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	72-43-5	Methoxychlor	370	U	370	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	591-78-6	Methyl N-Butyl Ketone	75	U	75	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	91-20-3	Naphthalene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-02-0	Nickel	18		8	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	98-95-3	Nitrobenzene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	621-64-7	N-Nitroso-di-n-propylamine	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	86-30-6	N-Nitrosodiphenylamine	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	106-47-8	P-Chloroaniline	380	J	1400	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	87-86-5	Pentachlorophenol	18	U	18	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	85-01-8	Phenanthrene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	108-95-2	Phenol	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	100-01-6	P-Nitroaniline	3700	UJ	3700	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-09-7	Potassium	1800	B	200	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	129-00-0	Pyrene	710	UJ	710	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7782-49-2	Selenium	5	U	5	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-22-4	Silver	2	U	2	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-23-5	Sodium	360	U	360	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	100-42-5	Styrene (Monomer)	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	127-18-4	Tetrachloroethene	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-28-0	Thallium	5	U	5	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	108-88-3	Toluene	8.5	J	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	8001-35-2	Toxaphene	3700	U	3700	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	156-60-5	trans-1,2-Dichloroethene	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	10061-02-6	trans-1,3-Dichloropropene	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	79-01-6	Trichloroethene	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-62-2	Vanadium	29		2	mg/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	75-01-4	Vinyl chloride	15	U	15	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	1330-20-7	Xylenes, Total	30	U	30	ug/Kg
SED-SA2-GMCS-PDA2 DUP	SED-SA2-GMCS-PDA2	9/22/2005	Duplicate	7440-66-6	Zinc	200		4	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	71-55-6	1,1,1-Trichloroethane	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	79-00-5	1,1,2-Trichloroethane	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	75-34-3	1,1-Dichloroethane	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	75-35-4	1,1-Dichloroethylene	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	120-82-1	1,2,4-Trichlorobenzene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	95-50-1	1,2-Dichlorobenzene	52	J	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	107-06-2	1,2-Dichloroethane	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	540-59-0	1,2-Dichloroethene (total)	14	U	14	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	78-87-5	1,2-Dichloropropane	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	541-73-1	1,3-Dichlorobenzene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	106-46-7	1,4-Dichlorobenzene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	93-76-5	2,4,5-T	12	U	12	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	93-72-1	2,4,5-TP (Silvex)	12	U	12	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	95-95-4	2,4,5-Trichlorophenol	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	88-06-2	2,4,6-Trichlorophenol	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	94-75-7	2,4-D	56		12	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	94-82-6	2,4-DB	12	U	12	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	120-83-2	2,4-Dichlorophenol	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	105-67-9	2,4-Dimethylphenol	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	51-28-5	2,4-Dinitrophenol	2400	U	2400	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	121-14-2	2,4-Dinitrotoluene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	606-20-2	2,6-Dinitrotoluene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	78-93-3	2-Butanone (MEK)	35	U	35	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	91-58-7	2-Chloronaphthalene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	95-57-8	2-Chlorophenol	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	91-57-6	2-Methylnaphthalene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	88-74-4	2-Nitroaniline	2400	U	2400	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	88-75-5	2-Nitrophenol	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	65794-96-9	3 & 4 Methylphenol	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	91-94-1	3,3'-Dichlorobenzidine	930	U	930	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	99-09-2	3-Nitroaniline	2400	U	2400	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	72-54-8	4,4'-DDD	6.5		4.6	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	72-55-9	4,4'-DDE	4.6	U	4.6	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	50-29-3	4,4'-DDT	4.6	U	4.6	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2400	U	2400	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	59-50-7	4-Chloro-3-methylphenol	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	35	U	35	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	100-02-7	4-Nitrophenol	2400	U	2400	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	83-32-9	Acenaphthene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	208-96-8	Acenaphthylene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	67-64-1	Acetone	70	U	70	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	309-00-2	Aldrin	2.4	U	2.4	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	319-84-6	alpha-BHC	2.4	U	2.4	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	5103-71-9	alpha-Chlordane	2.4	U	2.4	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7429-90-5	Aluminum	4600		25	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	120-12-7	Anthracene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-36-0	Antimony	2.5	U	2.5	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-38-2	Arsenic	3.7		1.2	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-39-3	Barium	97		1.2	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	71-43-2	Benzene	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	56-55-3	Benzo(a)anthracene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	50-32-8	Benzo(a)pyrene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	205-99-2	Benzo(b)fluoranthene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	191-24-2	Benzo(g,h,i)perylene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	207-08-9	Benzo(k)fluoranthene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	85-68-7	Benzyl Butyl Phthalate	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-41-7	Beryllium	0.28	J	0.49	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	319-85-7	beta-BHC	2.4	U	2.4	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	75-27-4	Bromodichloromethane	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	75-25-2	Bromoform	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	74-83-9	Bromomethane	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-43-9	Cadmium	0.75		0.62	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-70-2	Calcium	6500		62	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	86-74-8	Carbazole	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	75-15-0	Carbon Disulfide	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	56-23-5	Carbon Tetrachloride	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	108-90-7	Chlorobenzene	4.8	J	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	124-48-1	Chlorodibromomethane	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	75-00-3	Chloroethane	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	67-66-3	Chloroform	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	74-87-3	Chloromethane	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-47-3	Chromium	8.7		1.2	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	218-01-9	Chrysene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	156-59-2	cis-1,2-Dichloroethene	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	10061-01-5	cis-1,3-Dichloropropene	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-48-4	Cobalt	4.1		1.2	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-50-8	Copper	11		2.5	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	75-99-0	Dalapon	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	319-86-8	delta-BHC	2.4	U	2.4	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	53-70-3	Dibenzo(a,h)anthracene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	132-64-9	Dibenzofuran	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	1918-00-9	Dicamba	12	U	12	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	75-09-2	Dichloromethane	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	120-36-5	Dichlorprop	15	J	140	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	60-57-1	Dieldrin	4.6	U	4.6	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	84-66-2	Diethyl Phthalate	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	131-11-3	Dimethyl Phthalate	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	84-74-2	Di-n-butylphthalate	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	117-84-0	Di-n-octylphthalate	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	88-85-7	Dinoseb	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	959-98-8	Endosulfan I	2.4	U	2.4	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	33213-65-9	Endosulfan II	4.6	U	4.6	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	1031-07-8	Endosulfan Sulfate	4.6	U	4.6	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	72-20-8	Endrin	4.6	U	4.6	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7421-93-4	Endrin Aldehyde	4.6	U	4.6	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	53494-70-5	Endrin Ketone	4.6	UJ	4.6	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	100-41-4	Ethylbenzene	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	206-44-0	Fluoranthene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	86-73-7	Fluorene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	58-89-9	gamma-BHC (Lindane)	2.4	U	2.4	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	5103-74-2	gamma-Chlordane	2.4	U	2.4	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	76-44-8	Heptachlor	2.4	U	2.4	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	1024-57-3	Heptachlor Epoxide	2.4	U	2.4	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	118-74-1	Hexachlorobenzene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	87-68-3	Hexachlorobutadiene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	77-47-4	Hexachlorocyclopentadiene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	67-72-1	Hexachloroethane	460	U	460	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7439-89-6	Iron	8200		6.2	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	78-59-1	Isophorone	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7439-92-1	Lead	18		0.62	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7439-95-4	Magnesium	2300		62	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7439-96-5	Manganese	420		1.2	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2800	U	2800	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	93-65-2	MCPP	2800	U	2800	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7439-97-6	Mercury	0.016	J	0.026	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	72-43-5	Methoxychlor	24	U	24	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	591-78-6	Methyl N-Butyl Ketone	35	U	35	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	91-20-3	Naphthalene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-02-0	Nickel	9.7		4.9	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	98-95-3	Nitrobenzene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	86-30-6	N-Nitrosodiphenylamine	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	106-47-8	P-Chloroaniline	38	J	930	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	87-86-5	Pentachlorophenol	12	U	12	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	85-01-8	Phenanthrene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	108-95-2	Phenol	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	100-01-6	P-Nitroaniline	2400	U	2400	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-09-7	Potassium	720	B	120	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	129-00-0	Pyrene	460	U	460	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7782-49-2	Selenium	3.1	U	3.1	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-22-4	Silver	1.2	U	1.2	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-23-5	Sodium	210	U	210	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	100-42-5	Styrene (Monomer)	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	127-18-4	Tetrachloroethene	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-28-0	Thallium	3.1	U	3.1	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	108-88-3	Toluene	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	8001-35-2	Toxaphene	240	U	240	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	156-60-5	trans-1,2-Dichloroethene	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	10061-02-6	trans-1,3-Dichloropropene	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	79-01-6	Trichloroethene	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-62-2	Vanadium	13		1.2	mg/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	75-01-4	Vinyl chloride	7	U	7	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	1330-20-7	Xylenes, Total	14	U	14	ug/Kg
SED-SA2-GMCS-PDA3		9/22/2005	Field Sample	7440-66-6	Zinc	260		2.5	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	71-55-6	1,1,1-Trichloroethane	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	79-00-5	1,1,2-Trichloroethane	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	75-34-3	1,1-Dichloroethane	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	75-35-4	1,1-Dichloroethylene	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	120-82-1	1,2,4-Trichlorobenzene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	95-50-1	1,2-Dichlorobenzene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	107-06-2	1,2-Dichloroethane	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	540-59-0	1,2-Dichloroethene (total)	7.8	U	7.8	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	78-87-5	1,2-Dichloropropane	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	541-73-1	1,3-Dichlorobenzene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	106-46-7	1,4-Dichlorobenzene	650		410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	93-76-5	2,4,5-T	10	U	10	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	95-95-4	2,4,5-Trichlorophenol	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	88-06-2	2,4,6-Trichlorophenol	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	94-75-7	2,4-D	10	U	10	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	94-82-6	2,4-DB	10	U	10	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	120-83-2	2,4-Dichlorophenol	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	105-67-9	2,4-Dimethylphenol	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	51-28-5	2,4-Dinitrophenol	2100	U	2100	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	121-14-2	2,4-Dinitrotoluene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	606-20-2	2,6-Dinitrotoluene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	78-93-3	2-Butanone (MEK)	19	U	19	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	91-58-7	2-Chloronaphthalene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	95-57-8	2-Chlorophenol	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	91-57-6	2-Methylnaphthalene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	88-74-4	2-Nitroaniline	2100	U	2100	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	88-75-5	2-Nitrophenol	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	65794-96-9	3 & 4 Methylphenol	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	91-94-1	3,3'-Dichlorobenzidine	810	U	810	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	99-09-2	3-Nitroaniline	2100	U	2100	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	72-54-8	4,4'-DDD	1.1	J	4.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	72-55-9	4,4'-DDE	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	50-29-3	4,4'-DDT	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2100	U	2100	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	59-50-7	4-Chloro-3-methylphenol	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	410	U	410	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	19	U	19	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	100-02-7	4-Nitrophenol	2100	U	2100	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	83-32-9	Acenaphthene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	208-96-8	Acenaphthylene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	67-64-1	Acetone	39	U	39	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	309-00-2	Aldrin	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	319-84-6	alpha-BHC	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7429-90-5	Aluminum	2100		22	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	120-12-7	Anthracene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-36-0	Antimony	2.2	U	2.2	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-38-2	Arsenic	2.2		1.1	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-39-3	Barium	43		1.1	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	71-43-2	Benzene	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	56-55-3	Benzo(a)anthracene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	50-32-8	Benzo(a)pyrene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	205-99-2	Benzo(b)fluoranthene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	191-24-2	Benzo(g,h,i)perylene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	207-08-9	Benzo(k)fluoranthene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	85-68-7	Benzyl Butyl Phthalate	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-41-7	Beryllium	0.14	J	0.45	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	319-85-7	beta-BHC	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	75-27-4	Bromodichloromethane	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	75-25-2	Bromoform	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	74-83-9	Bromomethane	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-43-9	Cadmium	0.29	J	0.56	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-70-2	Calcium	2500		56	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	86-74-8	Carbazole	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	75-15-0	Carbon Disulfide	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	56-23-5	Carbon Tetrachloride	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	108-90-7	Chlorobenzene	56		3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	124-48-1	Chlorodibromomethane	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	75-00-3	Chloroethane	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	67-66-3	Chloroform	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	74-87-3	Chloromethane	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-47-3	Chromium	3.8		1.1	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	218-01-9	Chrysene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	156-59-2	cis-1,2-Dichloroethene	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-48-4	Cobalt	3.1		1.1	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-50-8	Copper	3.9		2.2	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	75-99-0	Dalapon	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	319-86-8	delta-BHC	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	53-70-3	Dibenzo(a,h)anthracene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	132-64-9	Dibenzofuran	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	1918-00-9	Dicamba	10	U	10	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	75-09-2	Dichloromethane	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	60-57-1	Dieldrin	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	84-66-2	Diethyl Phthalate	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	131-11-3	Dimethyl Phthalate	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	84-74-2	Di-n-butylphthalate	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	117-84-0	Di-n-octylphthalate	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	88-85-7	Dinoseb	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	959-98-8	Endosulfan I	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	33213-65-9	Endosulfan II	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	1031-07-8	Endosulfan Sulfate	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	72-20-8	Endrin	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7421-93-4	Endrin Aldehyde	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	53494-70-5	Endrin Ketone	4.1	UJ	4.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	100-41-4	Ethylbenzene	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	206-44-0	Fluoranthene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	86-73-7	Fluorene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	58-89-9	gamma-BHC (Lindane)	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	5103-74-2	gamma-Chlordane	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	76-44-8	Heptachlor	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	1024-57-3	Heptachlor Epoxide	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	118-74-1	Hexachlorobenzene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	87-68-3	Hexachlorobutadiene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	77-47-4	Hexachlorocyclopentadiene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	67-72-1	Hexachloroethane	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7439-89-6	Iron	4500		5.6	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	78-59-1	Isophorone	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7439-92-1	Lead	6.3		0.56	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7439-95-4	Magnesium	1000		56	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7439-96-5	Manganese	130		1.1	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2500	U	2500	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	93-65-2	MCPP	2500	U	2500	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7439-97-6	Mercury	0.021	J	0.022	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	72-43-5	Methoxychlor	21	U	21	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	591-78-6	Methyl N-Butyl Ketone	19	U	19	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	91-20-3	Naphthalene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-02-0	Nickel	7.2		4.5	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	98-95-3	Nitrobenzene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	86-30-6	N-Nitrosodiphenylamine	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	106-47-8	P-Chloroaniline	320	J	810	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	87-86-5	Pentachlorophenol	10	U	10	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	85-01-8	Phenanthrene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	108-95-2	Phenol	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	100-01-6	P-Nitroaniline	2100	U	2100	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-09-7	Potassium	360	B	110	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	129-00-0	Pyrene	410	U	410	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7782-49-2	Selenium	2.8	U	2.8	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-22-4	Silver	1.1	U	1.1	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-23-5	Sodium	150	U	150	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	100-42-5	Styrene (Monomer)	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	127-18-4	Tetrachloroethene	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-28-0	Thallium	2.8	U	2.8	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	108-88-3	Toluene	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	8001-35-2	Toxaphene	210	U	210	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	156-60-5	trans-1,2-Dichloroethene	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	79-01-6	Trichloroethene	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-62-2	Vanadium	6		1.1	mg/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	75-01-4	Vinyl chloride	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	1330-20-7	Xylenes, Total	7.8	U	7.8	ug/Kg
SED-SA2-GMCS-PDA4		9/22/2005	Field Sample	7440-66-6	Zinc	140		2.2	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	71-55-6	1,1,1-Trichloroethane	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	79-00-5	1,1,2-Trichloroethane	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	75-34-3	1,1-Dichloroethane	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	75-35-4	1,1-Dichloroethylene	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	120-82-1	1,2,4-Trichlorobenzene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	95-50-1	1,2-Dichlorobenzene	74	J	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	107-06-2	1,2-Dichloroethane	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	540-59-0	1,2-Dichloroethene (total)	11	U	11	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	78-87-5	1,2-Dichloropropane	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	541-73-1	1,3-Dichlorobenzene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	106-46-7	1,4-Dichlorobenzene	37	J	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	93-76-5	2,4,5-T	11	U	11	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	93-72-1	2,4,5-TP (Silvex)	11	U	11	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	95-95-4	2,4,5-Trichlorophenol	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	88-06-2	2,4,6-Trichlorophenol	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	94-75-7	2,4-D	63		11	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	94-82-6	2,4-DB	11	U	11	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	120-83-2	2,4-Dichlorophenol	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	105-67-9	2,4-Dimethylphenol	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	51-28-5	2,4-Dinitrophenol	2300	U	2300	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	121-14-2	2,4-Dinitrotoluene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	606-20-2	2,6-Dinitrotoluene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	78-93-3	2-Butanone (MEK)	27	U	27	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	91-58-7	2-Chloronaphthalene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	95-57-8	2-Chlorophenol	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	91-57-6	2-Methylnaphthalene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	88-74-4	2-Nitroaniline	2300	U	2300	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	88-75-5	2-Nitrophenol	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	65794-96-9	3 & 4 Methylphenol	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	91-94-1	3,3'-Dichlorobenzidine	890	U	890	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	99-09-2	3-Nitroaniline	2300	U	2300	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	72-54-8	4,4'-DDD	4.5	U	4.5	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	72-55-9	4,4'-DDE	4.5	U	4.5	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	50-29-3	4,4'-DDT	4.5	U	4.5	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2300	U	2300	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	59-50-7	4-Chloro-3-methylphenol	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	27	U	27	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	100-02-7	4-Nitrophenol	2300	U	2300	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	83-32-9	Acenaphthene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	208-96-8	Acenaphthylene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	67-64-1	Acetone	54	U	54	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	309-00-2	Aldrin	2.3	U	2.3	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	319-84-6	alpha-BHC	2.3	U	2.3	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	5103-71-9	alpha-Chlordane	2.3	U	2.3	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7429-90-5	Aluminum	2400		26	mg/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	120-12-7	Anthracene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-36-0	Antimony	2.6	U	2.6	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-38-2	Arsenic	3.4		1.3	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-39-3	Barium	93		1.3	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	71-43-2	Benzene	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	56-55-3	Benzo(a)anthracene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	50-32-8	Benzo(a)pyrene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	205-99-2	Benzo(b)fluoranthene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	191-24-2	Benzo(g,h,i)perylene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	207-08-9	Benzo(k)fluoranthene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	85-68-7	Benzyl Butyl Phthalate	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-41-7	Beryllium	0.18	J	0.51	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	319-85-7	beta-BHC	2.3	U	2.3	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	111-44-4	bis(2-Chloroethyl)ether	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	55	J	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	75-27-4	Bromodichloromethane	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	75-25-2	Bromoform	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	74-83-9	Bromomethane	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-43-9	Cadmium	1.7		0.64	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-70-2	Calcium	5600		64	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	86-74-8	Carbazole	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	75-15-0	Carbon Disulfide	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	56-23-5	Carbon Tetrachloride	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	108-90-7	Chlorobenzene	4.7	J	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	124-48-1	Chlorodibromomethane	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	75-00-3	Chloroethane	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	67-66-3	Chloroform	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	74-87-3	Chloromethane	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-47-3	Chromium	5.3		1.3	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	218-01-9	Chrysene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	156-59-2	cis-1,2-Dichloroethene	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	10061-01-5	cis-1,3-Dichloropropene	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-48-4	Cobalt	3.3		1.3	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-50-8	Copper	9.2		2.6	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	75-99-0	Dalapon	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	319-86-8	delta-BHC	2.3	U	2.3	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	53-70-3	Dibenzo(a,h)anthracene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	132-64-9	Dibenzofuran	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	1918-00-9	Dicamba	11	U	11	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	75-09-2	Dichloromethane	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	120-36-5	Dichlorprop	18	J	140	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	60-57-1	Dieldrin	4.5	U	4.5	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	84-66-2	Diethyl Phthalate	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	131-11-3	Dimethyl Phthalate	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	84-74-2	Di-n-butylphthalate	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	117-84-0	Di-n-octylphthalate	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	88-85-7	Dinoseb	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	959-98-8	Endosulfan I	2.3	U	2.3	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	33213-65-9	Endosulfan II	4.5	U	4.5	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	1031-07-8	Endosulfan Sulfate	4.5	U	4.5	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	72-20-8	Endrin	4.5	U	4.5	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7421-93-4	Endrin Aldehyde	4.5	U	4.5	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	53494-70-5	Endrin Ketone	4.5	UJ	4.5	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	100-41-4	Ethylbenzene	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	206-44-0	Fluoranthene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	86-73-7	Fluorene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	58-89-9	gamma-BHC (Lindane)	2.3	U	2.3	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	5103-74-2	gamma-Chlordane	2.3	U	2.3	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	76-44-8	Heptachlor	2.3	U	2.3	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	1024-57-3	Heptachlor Epoxide	2.3	U	2.3	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	118-74-1	Hexachlorobenzene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	87-68-3	Hexachlorobutadiene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	77-47-4	Hexachlorocyclopentadiene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	67-72-1	Hexachloroethane	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7439-89-6	Iron	6500		6.4	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	78-59-1	Isophorone	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7439-92-1	Lead	29	J	0.64	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7439-95-4	Magnesium	2100		64	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7439-96-5	Manganese	210	J	1.3	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2700	U	2700	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	93-65-2	MCPP	2700	U	2700	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7439-97-6	Mercury	0.023	J	0.024	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	72-43-5	Methoxychlor	23	U	23	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	591-78-6	Methyl N-Butyl Ketone	27	U	27	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	91-20-3	Naphthalene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-02-0	Nickel	7.9		5.1	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	98-95-3	Nitrobenzene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	450	U	450	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	86-30-6	N-Nitrosodiphenylamine	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	106-47-8	P-Chloroaniline	86	J	890	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	87-86-5	Pentachlorophenol	11	U	11	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	85-01-8	Phenanthrene	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	108-95-2	Phenol	450	U	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	100-01-6	P-Nitroaniline	2300	U	2300	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-09-7	Potassium	460		130	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	129-00-0	Pyrene	32	J	450	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7782-49-2	Selenium	3.2	U	3.2	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-22-4	Silver	1.3	U	1.3	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-23-5	Sodium	200	U	200	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	100-42-5	Styrene (Monomer)	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	127-18-4	Tetrachloroethene	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-28-0	Thallium	3.2	U	3.2	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	108-88-3	Toluene	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	8001-35-2	Toxaphene	230	U	230	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	156-60-5	trans-1,2-Dichloroethene	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	10061-02-6	trans-1,3-Dichloropropene	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	79-01-6	Trichloroethene	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-62-2	Vanadium	8.4		1.3	mg/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	75-01-4	Vinyl chloride	5.4	U	5.4	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	1330-20-7	Xylenes, Total	3.6	J	11	ug/Kg
SED-SA2-GMCS-R3AM		9/21/2005	Field Sample	7440-66-6	Zinc	540		2.6	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	71-55-6	1,1,1-Trichloroethane	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	79-00-5	1,1,2-Trichloroethane	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	75-34-3	1,1-Dichloroethane	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	75-35-4	1,1-Dichloroethylene	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	120-82-1	1,2,4-Trichlorobenzene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	95-50-1	1,2-Dichlorobenzene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	107-06-2	1,2-Dichloroethane	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	540-59-0	1,2-Dichloroethene (total)	15	U	15	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	78-87-5	1,2-Dichloropropane	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	541-73-1	1,3-Dichlorobenzene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	106-46-7	1,4-Dichlorobenzene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	93-76-5	2,4,5-T	10	U	10	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	95-95-4	2,4,5-Trichlorophenol	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	88-06-2	2,4,6-Trichlorophenol	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	94-75-7	2,4-D	10	U	10	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	94-82-6	2,4-DB	10	U	10	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	120-83-2	2,4-Dichlorophenol	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	105-67-9	2,4-Dimethylphenol	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	51-28-5	2,4-Dinitrophenol	2100	U	2100	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	121-14-2	2,4-Dinitrotoluene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	606-20-2	2,6-Dinitrotoluene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	78-93-3	2-Butanone (MEK)	38	U	38	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	91-58-7	2-Chloronaphthalene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	95-57-8	2-Chlorophenol	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	91-57-6	2-Methylnaphthalene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	88-74-4	2-Nitroaniline	2100	U	2100	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	88-75-5	2-Nitrophenol	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	65794-96-9	3 & 4 Methylphenol	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	91-94-1	3,3'-Dichlorobenzidine	810	U	810	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	99-09-2	3-Nitroaniline	2100	U	2100	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	72-54-8	4,4'-DDD	4	U	4	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	72-55-9	4,4'-DDE	4	U	4	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	50-29-3	4,4'-DDT	4	U	4	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2100	U	2100	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	59-50-7	4-Chloro-3-methylphenol	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	38	U	38	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	100-02-7	4-Nitrophenol	2100	U	2100	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	83-32-9	Acenaphthene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	208-96-8	Acenaphthylene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	67-64-1	Acetone	76	U	76	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	309-00-2	Aldrin	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	319-84-6	alpha-BHC	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7429-90-5	Aluminum	1000		22	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	120-12-7	Anthracene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-36-0	Antimony	2.2	U	2.2	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-38-2	Arsenic	1.3		1.1	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-39-3	Barium	26		1.1	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	71-43-2	Benzene	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	56-55-3	Benzo(a)anthracene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	50-32-8	Benzo(a)pyrene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	205-99-2	Benzo(b)fluoranthene	400	U	400	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	191-24-2	Benzo(g,h,i)perylene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	207-08-9	Benzo(k)fluoranthene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	85-68-7	Benzyl Butyl Phthalate	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-41-7	Beryllium	0.081	J	0.45	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	319-85-7	beta-BHC	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	111-44-4	bis(2-Chloroethyl)ether	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	75-27-4	Bromodichloromethane	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	75-25-2	Bromoform	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	74-83-9	Bromomethane	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-43-9	Cadmium	0.56	U	0.56	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-70-2	Calcium	1800		56	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	86-74-8	Carbazole	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	75-15-0	Carbon Disulfide	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	56-23-5	Carbon Tetrachloride	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	108-90-7	Chlorobenzene	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	124-48-1	Chlorodibromomethane	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	75-00-3	Chloroethane	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	67-66-3	Chloroform	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	74-87-3	Chloromethane	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-47-3	Chromium	2.8		1.1	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	218-01-9	Chrysene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	156-59-2	cis-1,2-Dichloroethene	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	10061-01-5	cis-1,3-Dichloropropene	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-48-4	Cobalt	2.5		1.1	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-50-8	Copper	1	J	2.2	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	75-99-0	Dalapon	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	319-86-8	delta-BHC	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	53-70-3	Dibenzo(a,h)anthracene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	132-64-9	Dibenzofuran	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	1918-00-9	Dicamba	10	U	10	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	75-09-2	Dichloromethane	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	120-36-5	Dichlorprop	120	U	120	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	60-57-1	Dieldrin	4	U	4	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	84-66-2	Diethyl Phthalate	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	131-11-3	Dimethyl Phthalate	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	84-74-2	Di-n-butylphthalate	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	117-84-0	Di-n-octylphthalate	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	88-85-7	Dinoseb	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	959-98-8	Endosulfan I	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	33213-65-9	Endosulfan II	4	U	4	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	1031-07-8	Endosulfan Sulfate	4	U	4	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	72-20-8	Endrin	4	U	4	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7421-93-4	Endrin Aldehyde	4	U	4	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	53494-70-5	Endrin Ketone	4	UJ	4	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	100-41-4	Ethylbenzene	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	206-44-0	Fluoranthene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	86-73-7	Fluorene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	58-89-9	gamma-BHC (Lindane)	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	5103-74-2	gamma-Chlordane	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	76-44-8	Heptachlor	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	1024-57-3	Heptachlor Epoxide	2.1	U	2.1	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	118-74-1	Hexachlorobenzene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	87-68-3	Hexachlorobutadiene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	77-47-4	Hexachlorocyclopentadiene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	67-72-1	Hexachloroethane	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7439-89-6	Iron	3500		5.6	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	78-59-1	Isophorone	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7439-92-1	Lead	3.4	B	0.56	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7439-95-4	Magnesium	720		56	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7439-96-5	Manganese	100		1.1	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2400	U	2400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	93-65-2	MCPP	2400	U	2400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7439-97-6	Mercury	0.022	UJ	0.022	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	72-43-5	Methoxychlor	21	U	21	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	591-78-6	Methyl N-Butyl Ketone	38	U	38	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	91-20-3	Naphthalene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-02-0	Nickel	6.2		4.5	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	98-95-3	Nitrobenzene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	86-30-6	N-Nitrosodiphenylamine	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	106-47-8	P-Chloroaniline	810	U	810	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	87-86-5	Pentachlorophenol	10	U	10	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	85-01-8	Phenanthrene	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	108-95-2	Phenol	400	U	400	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	100-01-6	P-Nitroaniline	2100	U	2100	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-09-7	Potassium	190		110	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	129-00-0	Pyrene	400	U	400	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7782-49-2	Selenium	2.8	U	2.8	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-22-4	Silver	1.1	U	1.1	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-23-5	Sodium	140	U	140	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	100-42-5	Styrene (Monomer)	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	127-18-4	Tetrachloroethene	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-28-0	Thallium	2.8	U	2.8	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	108-88-3	Toluene	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	8001-35-2	Toxaphene	210	U	210	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	156-60-5	trans-1,2-Dichloroethene	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	10061-02-6	trans-1,3-Dichloropropene	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	79-01-6	Trichloroethene	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-62-2	Vanadium	5.7		1.1	mg/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	75-01-4	Vinyl chloride	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	1330-20-7	Xylenes, Total	15	U	15	ug/Kg
SED-SA2-GMCS-R3BM		9/21/2005	Field Sample	7440-66-6	Zinc	26		2.2	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	71-55-6	1,1,1-Trichloroethane	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	79-00-5	1,1,2-Trichloroethane	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	75-34-3	1,1-Dichloroethane	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	75-35-4	1,1-Dichloroethylene	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	120-82-1	1,2,4-Trichlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	95-50-1	1,2-Dichlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	107-06-2	1,2-Dichloroethane	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	540-59-0	1,2-Dichloroethene (total)	10	U	10	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	78-87-5	1,2-Dichloropropane	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	541-73-1	1,3-Dichlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	106-46-7	1,4-Dichlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	93-76-5	2,4,5-T	9.5	U	9.5	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	93-72-1	2,4,5-TP (Silvex)	9.5	U	9.5	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	95-95-4	2,4,5-Trichlorophenol	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	88-06-2	2,4,6-Trichlorophenol	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	94-75-7	2,4-D	9.5	U	9.5	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	94-82-6	2,4-DB	9.5	U	9.5	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	120-83-2	2,4-Dichlorophenol	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	105-67-9	2,4-Dimethylphenol	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	51-28-5	2,4-Dinitrophenol	1900	U	1900	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	121-14-2	2,4-Dinitrotoluene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	606-20-2	2,6-Dinitrotoluene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	78-93-3	2-Butanone (MEK)	26	U	26	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	91-58-7	2-Chloronaphthalene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	95-57-8	2-Chlorophenol	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	91-57-6	2-Methylnaphthalene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	88-74-4	2-Nitroaniline	1900	U	1900	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	88-75-5	2-Nitrophenol	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	65794-96-9	3 & 4 Methylphenol	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	91-94-1	3,3'-Dichlorobenzidine	750	U	750	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	99-09-2	3-Nitroaniline	1900	U	1900	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	72-54-8	4,4'-DDD	3.8	UJ	3.8	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	72-55-9	4,4'-DDE	3.8	UJ	3.8	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	50-29-3	4,4'-DDT	3.8	UJ	3.8	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	1900	U	1900	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	59-50-7	4-Chloro-3-methylphenol	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	26	U	26	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	100-02-7	4-Nitrophenol	1900	U	1900	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	83-32-9	Acenaphthene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	208-96-8	Acenaphthylene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	67-64-1	Acetone	52	U	52	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	309-00-2	Aldrin	1.9	UJ	1.9	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	319-84-6	alpha-BHC	1.9	UJ	1.9	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	5103-71-9	alpha-Chlordane	1.9	UJ	1.9	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7429-90-5	Aluminum	1100		20	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	120-12-7	Anthracene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-36-0	Antimony	2	U	2	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-38-2	Arsenic	0.98	J	1	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-39-3	Barium	17		1	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	71-43-2	Benzene	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	56-55-3	Benzo(a)anthracene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	50-32-8	Benzo(a)pyrene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	205-99-2	Benzo(b)fluoranthene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	191-24-2	Benzo(g,h,i)perylene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	207-08-9	Benzo(k)fluoranthene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	85-68-7	Benzyl Butyl Phthalate	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-41-7	Beryllium	0.064	J	0.4	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	319-85-7	beta-BHC	1.9	UJ	1.9	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	111-44-4	bis(2-Chloroethyl)ether	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	380	U	380	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	75-27-4	Bromodichloromethane	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	75-25-2	Bromoform	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	74-83-9	Bromomethane	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-43-9	Cadmium	0.5	U	0.5	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-70-2	Calcium	1700		50	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	86-74-8	Carbazole	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	75-15-0	Carbon Disulfide	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	56-23-5	Carbon Tetrachloride	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	108-90-7	Chlorobenzene	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	124-48-1	Chlorodibromomethane	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	75-00-3	Chloroethane	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	67-66-3	Chloroform	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	74-87-3	Chloromethane	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-47-3	Chromium	3.2		1	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	218-01-9	Chrysene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	156-59-2	cis-1,2-Dichloroethene	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	10061-01-5	cis-1,3-Dichloropropene	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-48-4	Cobalt	2.8		1	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-50-8	Copper	0.66	J	2	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	75-99-0	Dalapon	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	319-86-8	delta-BHC	1.9	UJ	1.9	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	53-70-3	Dibenzo(a,h)anthracene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	132-64-9	Dibenzofuran	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	1918-00-9	Dicamba	9.5	U	9.5	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	75-09-2	Dichloromethane	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	120-36-5	Dichlorprop	110	U	110	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	60-57-1	Dieldrin	3.8	UJ	3.8	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	84-66-2	Diethyl Phthalate	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	131-11-3	Dimethyl Phthalate	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	84-74-2	Di-n-butylphthalate	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	117-84-0	Di-n-octylphthalate	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	88-85-7	Dinoseb	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	959-98-8	Endosulfan I	1.9	UJ	1.9	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	33213-65-9	Endosulfan II	3.8	UJ	3.8	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	1031-07-8	Endosulfan Sulfate	3.8	UJ	3.8	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	72-20-8	Endrin	3.8	UJ	3.8	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7421-93-4	Endrin Aldehyde	3.8	UJ	3.8	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	53494-70-5	Endrin Ketone	3.8	UJ	3.8	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	100-41-4	Ethylbenzene	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	206-44-0	Fluoranthene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	86-73-7	Fluorene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	58-89-9	gamma-BHC (Lindane)	1.9	UJ	1.9	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	5103-74-2	gamma-Chlordane	1.9	UJ	1.9	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	76-44-8	Heptachlor	1.9	UJ	1.9	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	1024-57-3	Heptachlor Epoxide	1.9	UJ	1.9	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	118-74-1	Hexachlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	87-68-3	Hexachlorobutadiene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	77-47-4	Hexachlorocyclopentadiene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	67-72-1	Hexachloroethane	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7439-89-6	Iron	3200		5	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	78-59-1	Isophorone	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7439-92-1	Lead	2	B	0.5	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7439-95-4	Magnesium	970		50	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7439-96-5	Manganese	71		1	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	U	2300	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	93-65-2	MCPP	2300	U	2300	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7439-97-6	Mercury	0.0042	J	0.02	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	72-43-5	Methoxychlor	19	UJ	19	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	591-78-6	Methyl N-Butyl Ketone	26	U	26	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	91-20-3	Naphthalene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-02-0	Nickel	6		4	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	98-95-3	Nitrobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	86-30-6	N-Nitrosodiphenylamine	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	106-47-8	P-Chloroaniline	750	U	750	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	87-86-5	Pentachlorophenol	9.5	U	9.5	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	85-01-8	Phenanthrene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	108-95-2	Phenol	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	100-01-6	P-Nitroaniline	1900	U	1900	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-09-7	Potassium	150		100	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	129-00-0	Pyrene	380	U	380	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7782-49-2	Selenium	2.5	U	2.5	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-22-4	Silver	1	U	1	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-23-5	Sodium	110	U	110	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	100-42-5	Styrene (Monomer)	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	127-18-4	Tetrachloroethene	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-28-0	Thallium	2.5	U	2.5	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	108-88-3	Toluene	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	8001-35-2	Toxaphene	190	UJ	190	ug/Kg

Appendix II-B2
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	156-60-5	trans-1,2-Dichloroethene	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	10061-02-6	trans-1,3-Dichloropropene	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	79-01-6	Trichloroethene	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-62-2	Vanadium	4.1		1	mg/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	75-01-4	Vinyl chloride	5.2	U	5.2	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	1330-20-7	Xylenes, Total	10	U	10	ug/Kg
SED-SA2-GMCS-R3CM		9/21/2005	Field Sample	7440-66-6	Zinc	9.1		2	mg/Kg

Appendix II-B3

Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2007

Appendix II-B3
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-9		3/20/2007	Field Sample	71-55-6	1,1,1-Trichloroethane	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	79-00-5	1,1,2-Trichloroethane	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	75-34-3	1,1-Dichloroethane	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	75-35-4	1,1-Dichloroethylene	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	120-82-1	1,2,4-Trichlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	95-50-1	1,2-Dichlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	107-06-2	1,2-Dichloroethane	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	78-87-5	1,2-Dichloropropane	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	541-73-1	1,3-Dichlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	106-46-7	1,4-Dichlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	93-76-5	2,4,5-T	9.4	U	9.4	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	93-72-1	2,4,5-TP (Silvex)	9.4	U	9.4	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	95-95-4	2,4,5-Trichlorophenol	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	88-06-2	2,4,6-Trichlorophenol	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	94-75-7	2,4-D	9.4	U	9.4	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	94-82-6	2,4-DB	9.4	U	9.4	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	120-83-2	2,4-Dichlorophenol	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	105-67-9	2,4-Dimethylphenol	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	51-28-5	2,4-Dinitrophenol	1900	U	1900	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	121-14-2	2,4-Dinitrotoluene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	606-20-2	2,6-Dinitrotoluene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	78-93-3	2-Butanone (MEK)	19	U *	19	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	91-58-7	2-Chloronaphthalene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	95-57-8	2-Chlorophenol	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	91-57-6	2-Methylnaphthalene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	88-74-4	2-Nitroaniline	1900	U	1900	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	88-75-5	2-Nitrophenol	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	65794-96-9	3 & 4 Methylphenol	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	91-94-1	3,3'-Dichlorobenzidine	750	U	750	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	99-09-2	3-Nitroaniline	1900	U	1900	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	72-54-8	4,4'-DDD	3.7	U	3.7	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	72-55-9	4,4'-DDE	3.7	U	3.7	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	50-29-3	4,4'-DDT	3.7	U	3.7	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	1900	U	1900	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	59-50-7	4-Chloro-3-methylphenol	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	19	UJ	19	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	100-02-7	4-Nitrophenol	1900	U	1900	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	83-32-9	Acenaphthene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	208-96-8	Acenaphthylene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	67-64-1	Acetone	14	J	38	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	309-00-2	Aldrin	1.9	U	1.9	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	319-84-6	alpha-BHC	1.9	U	1.9	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	5103-71-9	alpha-Chlordane	1.9	U	1.9	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7429-90-5	Aluminum	990	B	21	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	120-12-7	Anthracene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-36-0	Antimony	2.1	U	2.1	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-38-2	Arsenic	1.7		1	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-39-3	Barium	18		1	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	71-43-2	Benzene	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	56-55-3	Benzo(a)anthracene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	50-32-8	Benzo(a)pyrene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	205-99-2	Benzo(b)fluoranthene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	191-24-2	Benzo(g,h,i)perylene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	207-08-9	Benzo(k)fluoranthene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	85-68-7	Benzyl Butyl Phthalate	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-41-7	Beryllium	0.084	J	0.41	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	319-85-7	beta-BHC	1.9	U	1.9	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	111-44-4	bis(2-Chloroethyl)ether	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	380	U	380	ug/Kg

Appendix II-B3
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-9		3/20/2007	Field Sample	75-27-4	Bromodichloromethane	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	75-25-2	Bromoform	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	74-83-9	Bromomethane	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-43-9	Cadmium	0.52	U	0.52	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-70-2	Calcium	1000	B	52	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	86-74-8	Carbazole	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample		Carbon Dioxide	610	N J B		ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	75-15-0	Carbon Disulfide	1.4	J	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	56-23-5	Carbon Tetrachloride	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	108-90-7	Chlorobenzene	1.5	J	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	124-48-1	Chlorodibromomethane	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	75-00-3	Chloroethane	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	67-66-3	Chloroform	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	74-87-3	Chloromethane	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-47-3	Chromium	3.8		1	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	218-01-9	Chrysene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	156-59-2	cis-1,2-Dichloroethene	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	10061-01-5	cis-1,3-Dichloropropene	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-48-4	Cobalt	3.1		1	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-50-8	Copper	1	J	2.1	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	75-99-0	Dalapon	190	U	190	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	319-86-8	delta-BHC	1.9	U *	1.9	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	53-70-3	Dibenzo(a,h)anthracene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	132-64-9	Dibenzofuran	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	1918-00-9	Dicamba	9.4	U	9.4	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	75-09-2	Dichloromethane	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	120-36-5	Dichlorprop	9.4	U	9.4	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	60-57-1	Dieldrin	3.7	U	3.7	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	84-66-2	Diethyl Phthalate	65	J	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	131-11-3	Dimethyl Phthalate	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	84-74-2	Di-n-butylphthalate	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	117-84-0	Di-n-octylphthalate	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	88-85-7	Dinoseb	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	959-98-8	Endosulfan I	1.9	U	1.9	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	33213-65-9	Endosulfan II	3.7	U	3.7	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	1031-07-8	Endosulfan Sulfate	3.7	U	3.7	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	72-20-8	Endrin	3.7	U	3.7	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7421-93-4	Endrin Aldehyde	3.7	U	3.7	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	53494-70-5	Endrin Ketone	3.7	U	3.7	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	100-41-4	Ethylbenzene	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	206-44-0	Fluoranthene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	86-73-7	Fluorene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	58-89-9	gamma-BHC (Lindane)	1.9	U	1.9	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	5103-74-2	gamma-Chlordane	1.9	U	1.9	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	76-44-8	Heptachlor	1.9	U	1.9	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	1024-57-3	Heptachlor Epoxide	1.9	U	1.9	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	118-74-1	Hexachlorobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	87-68-3	Hexachlorobutadiene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	77-47-4	Hexachlorocyclopentadiene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	67-72-1	Hexachloroethane	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7439-89-6	Iron	4300		5.2	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	78-59-1	Isophorone	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7439-92-1	Lead	3.3	B	0.52	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7439-95-4	Magnesium	600		52	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7439-96-5	Manganese	63		1	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	U	2300	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	93-65-2	MCPP	2300	U	2300	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7439-97-6	Mercury	0.021	U	0.021	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	72-43-5	Methoxychlor	19	U	19	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	591-78-6	Methyl N-Butyl Ketone	19	U	19	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	91-20-3	Naphthalene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-02-0	Nickel	7.9		4.1	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	98-95-3	Nitrobenzene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	380	U	380	ug/Kg

Appendix II-B3
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-9		3/20/2007	Field Sample	86-30-6	N-Nitrosodiphenylamine	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	106-47-8	P-Chloroaniline	750	U	750	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	87-86-5	Pentachlorophenol	4.8	U	4.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	85-01-8	Phenanthrene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	108-95-2	Phenol	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample		Phosphine oxide, triphenyl-	2800	J N		ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	100-01-6	P-Nitroaniline	1900	U	1900	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-09-7	Potassium	190		100	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	129-00-0	Pyrene	380	U	380	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7782-49-2	Selenium	2.6	U	2.6	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-22-4	Silver	1	U	1	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-23-5	Sodium	110	U	100	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	100-42-5	Styrene (Monomer)	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	127-18-4	Tetrachloroethene	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-28-0	Thallium	2.6	U	2.6	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	108-88-3	Toluene	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	8001-35-2	Toxaphene	190	U	190	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	156-60-5	trans-1,2-Dichloroethene	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	10061-02-6	trans-1,3-Dichloropropene	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	79-01-6	Trichloroethene	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-62-2	Vanadium	4.7		1	mg/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	75-01-4	Vinyl chloride	3.8	U	3.8	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	1330-20-7	Xylenes, Total	7.6	U	7.6	ug/Kg
SED-SA2-GMCS-9		3/20/2007	Field Sample	7440-66-6	Zinc	12		2.1	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample		(Carbethoxyethylidine)triphenylphosphora	1100	J N		ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	71-55-6	1,1,1-Trichloroethane	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	79-00-5	1,1,2-Trichloroethane	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	75-34-3	1,1-Dichloroethane	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	75-35-4	1,1-Dichloroethylene	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	120-82-1	1,2,4-Trichlorobenzene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	95-50-1	1,2-Dichlorobenzene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	107-06-2	1,2-Dichloroethane	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	78-87-5	1,2-Dichloropropane	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	541-73-1	1,3-Dichlorobenzene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	106-46-7	1,4-Dichlorobenzene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	93-76-5	2,4,5-T	9.7	U	9.7	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	93-72-1	2,4,5-TP (Silvex)	9.7	U	9.7	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	95-95-4	2,4,5-Trichlorophenol	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	88-06-2	2,4,6-Trichlorophenol	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	94-75-7	2,4-D	9.7	U	9.7	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	94-82-6	2,4-DB	9.7	U	9.7	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	120-83-2	2,4-Dichlorophenol	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	105-67-9	2,4-Dimethylphenol	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	51-28-5	2,4-Dinitrophenol	2000	U	2000	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	121-14-2	2,4-Dinitrotoluene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	606-20-2	2,6-Dinitrotoluene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	78-93-3	2-Butanone (MEK)	20	U *	20	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	91-58-7	2-Chloronaphthalene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	95-57-8	2-Chlorophenol	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	91-57-6	2-Methylnaphthalene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	88-74-4	2-Nitroaniline	2000	U	2000	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	88-75-5	2-Nitrophenol	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	65794-96-9	3 & 4 Methylphenol	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	91-94-1	3,3'-Dichlorobenzidine	770	U	770	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	99-09-2	3-Nitroaniline	2000	U	2000	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	72-54-8	4,4'-DDD	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	72-55-9	4,4'-DDE	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	50-29-3	4,4'-DDT	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	2000	U	2000	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	59-50-7	4-Chloro-3-methylphenol	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	390	U	390	ug/Kg

Appendix II-B3
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-5		3/20/2007	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	20	UJ	20	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	100-02-7	4-Nitrophenol	2000	U	2000	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	83-32-9	Acenaphthene	32	J	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	208-96-8	Acenaphthylene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	67-64-1	Acetone	20	J	41	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	309-00-2	Aldrin	2	U	2	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	319-84-6	alpha-BHC	2	U	2	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	5103-71-9	alpha-Chlordane	2	U	2	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7429-90-5	Aluminum	1000	B	21	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	120-12-7	Anthracene	41	J	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-36-0	Antimony	2.1	U	2.1	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-38-2	Arsenic	1.2		1.1	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-39-3	Barium	43		1.1	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	71-43-2	Benzene	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	56-55-3	Benzo(a)anthracene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	50-32-8	Benzo(a)pyrene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	205-99-2	Benzo(b)fluoranthene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	191-24-2	Benzo(g,h,i)perylene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	207-08-9	Benzo(k)fluoranthene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	85-68-7	Benzyl Butyl Phthalate	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-41-7	Beryllium	0.08	J	0.42	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	319-85-7	beta-BHC	2	U	2	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	111-44-4	bis(2-Chloroethyl)ether	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	75-27-4	Bromodichloromethane	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	75-25-2	Bromoform	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	74-83-9	Bromomethane	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-43-9	Cadmium	0.53	U	0.53	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-70-2	Calcium	1900	B	53	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	86-74-8	Carbazole	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample		Carbon Dioxide	540	N J B		ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	75-15-0	Carbon Disulfide	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	56-23-5	Carbon Tetrachloride	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	108-90-7	Chlorobenzene	1.9	J	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	124-48-1	Chlorodibromomethane	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	75-00-3	Chloroethane	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	67-66-3	Chloroform	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	74-87-3	Chloromethane	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-47-3	Chromium	2.5		1.1	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	218-01-9	Chrysene	42	J	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	156-59-2	cis-1,2-Dichloroethene	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	10061-01-5	cis-1,3-Dichloropropene	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-48-4	Cobalt	2.2		1.1	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-50-8	Copper	1.5	J	2.1	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	75-99-0	Dalapon	200	U	200	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	319-86-8	delta-BHC	2	U *	2	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	53-70-3	Dibenzo(a,h)anthracene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	132-64-9	Dibenzofuran	29	J	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	1918-00-9	Dicamba	9.7	U	9.7	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	75-09-2	Dichloromethane	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	120-36-5	Dichlorprop	9.7	U	9.7	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	60-57-1	Dieldrin	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	84-66-2	Diethyl Phthalate	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	131-11-3	Dimethyl Phthalate	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	84-74-2	Di-n-butylphthalate	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	117-84-0	Di-n-octylphthalate	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	88-85-7	Dinoseb	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	959-98-8	Endosulfan I	2	U	2	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	33213-65-9	Endosulfan II	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	1031-07-8	Endosulfan Sulfate	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	72-20-8	Endrin	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7421-93-4	Endrin Aldehyde	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	53494-70-5	Endrin Ketone	3.9	U	3.9	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	100-41-4	Ethylbenzene	4.1	U	4.1	ug/Kg

Appendix II-B3
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-5		3/20/2007	Field Sample	206-44-0	Fluoranthene	130	J	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	86-73-7	Fluorene	49	J	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	58-89-9	gamma-BHC (Lindane)	2	U	2	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	5103-74-2	gamma-Chlordane	2	U	2	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	76-44-8	Heptachlor	2	U	2	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	1024-57-3	Heptachlor Epoxide	2	U	2	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	118-74-1	Hexachlorobenzene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	87-68-3	Hexachlorobutadiene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	77-47-4	Hexachlorocyclopentadiene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	67-72-1	Hexachloroethane	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7439-89-6	Iron	3900		5.3	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	78-59-1	Isophorone	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7439-92-1	Lead	5.4	B	0.53	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7439-95-4	Magnesium	930		53	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7439-96-5	Manganese	66		1.1	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	U	2300	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	93-65-2	MCPP	2300	U	2300	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7439-97-6	Mercury	0.022	UJ	0.022	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	72-43-5	Methoxychlor	20	U	20	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	591-78-6	Methyl N-Butyl Ketone	20	U	20	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	91-20-3	Naphthalene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-02-0	Nickel	4.9		4.2	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	98-95-3	Nitrobenzene	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	86-30-6	N-Nitrosodiphenylamine	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	106-47-8	P-Chloroaniline	770	U	770	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	87-86-5	Pentachlorophenol	4.9	U	4.9	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	85-01-8	Phenanthrene	220	J	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	108-95-2	Phenol	390	U	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	100-01-6	P-Nitroaniline	2000	U	2000	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-09-7	Potassium	180		110	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	129-00-0	Pyrene	91	J	390	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7782-49-2	Selenium	2.6	U	2.6	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-22-4	Silver	1.1	U	1.1	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-23-5	Sodium	120	U	110	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	100-42-5	Styrene (Monomer)	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	127-18-4	Tetrachloroethene	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-28-0	Thallium	2.6	U	2.6	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	108-88-3	Toluene	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	8001-35-2	Toxaphene	200	U	200	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	156-60-5	trans-1,2-Dichloroethene	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	10061-02-6	trans-1,3-Dichloropropene	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	79-01-6	Trichloroethene	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-62-2	Vanadium	4		1.1	mg/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	75-01-4	Vinyl chloride	4.1	U	4.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	1330-20-7	Xylenes, Total	8.1	U	8.1	ug/Kg
SED-SA2-GMCS-5		3/20/2007	Field Sample	7440-66-6	Zinc	83		2.1	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		(Carbethoxyethylidine)triphenylphosphora	1300	J N		ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	71-55-6	1,1,1-Trichloroethane	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	79-34-5	1,1,2,2-Tetrachloroethane	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	79-00-5	1,1,2-Trichloroethane	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	75-34-3	1,1-Dichloroethane	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	75-35-4	1,1-Dichloroethylene	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	120-82-1	1,2,4-Trichlorobenzene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	95-50-1	1,2-Dichlorobenzene	150	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	107-06-2	1,2-Dichloroethane	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	78-87-5	1,2-Dichloropropane	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	541-73-1	1,3-Dichlorobenzene	170	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	106-46-7	1,4-Dichlorobenzene	1200		580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		1-Eicosene	650	J N		ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	93-76-5	2,4,5-T	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	93-72-1	2,4,5-TP (Silvex)	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	95-95-4	2,4,5-Trichlorophenol	580	U	580	ug/Kg

Appendix II-B3
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-2		3/21/2007	Field Sample	88-06-2	2,4,6-Trichlorophenol	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	94-75-7	2,4-D	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	94-82-6	2,4-DB	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	120-83-2	2,4-Dichlorophenol	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	105-67-9	2,4-Dimethylphenol	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	51-28-5	2,4-Dinitrophenol	3000	U	3000	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	121-14-2	2,4-Dinitrotoluene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	606-20-2	2,6-Dinitrotoluene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	78-93-3	2-Butanone (MEK)	46	J *	73	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	91-58-7	2-Chloronaphthalene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	95-57-8	2-Chlorophenol	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	91-57-6	2-Methylnaphthalene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	95-48-7	2-Methylphenol (o-Cresol)	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	88-74-4	2-Nitroaniline	3000	U	3000	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	88-75-5	2-Nitrophenol	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	65794-96-9	3 & 4 Methylphenol	100	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	91-94-1	3,3'-Dichlorobenzidine	1200	U	1200	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	99-09-2	3-Nitroaniline	3000	U	3000	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	72-54-8	4,4'-DDD	8.8	P	5.8	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	72-55-9	4,4'-DDE	5.8	U	5.8	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	50-29-3	4,4'-DDT	5.8	U	5.8	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	534-52-1	4,6-Dinitro-2-methylphenol	3000	U	3000	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	101-55-3	4-Bromophenyl Phenyl Ether	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	59-50-7	4-Chloro-3-methylphenol	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7005-72-3	4-Chlorophenyl Phenyl Ether	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	108-10-1	4-Methyl-2-pentanone (MIBK)	73	U	73	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	100-02-7	4-Nitrophenol	3000	U	3000	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	83-32-9	Acenaphthene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	208-96-8	Acenaphthylene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	67-64-1	Acetone	300	*	150	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Acrolein	57	J	290	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	309-00-2	Aldrin	3	U	3	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	319-84-6	alpha-BHC	3	U	3	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	5103-71-9	alpha-Chlordane	3	U	3	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7429-90-5	Aluminum	8700	B	32	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	120-12-7	Anthracene	61	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-36-0	Antimony	0.78	J	3.2	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-38-2	Arsenic	4.3		1.6	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-39-3	Barium	160		1.6	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	71-43-2	Benzene	27		15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	56-55-3	Benzo(a)anthracene	120	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	50-32-8	Benzo(a)pyrene	84	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	205-99-2	Benzo(b)fluoranthene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	191-24-2	Benzo(g,h,i)perylene	84	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	207-08-9	Benzo(k)fluoranthene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	85-68-7	Benzyl Butyl Phthalate	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-41-7	Beryllium	0.5	J	0.63	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	319-85-7	beta-BHC	3	U	3	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	111-91-1	bis(2-Chloroethoxy)methane	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	111-44-4	bis(2-Chloroethyl)ether	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	117-81-7	bis(2-Ethylhexyl)phthalate	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	75-27-4	Bromodichloromethane	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	75-25-2	Bromoform	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	74-83-9	Bromomethane	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Butanal, 3-methyl-	19	J N		ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-43-9	Cadmium	2		0.79	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-70-2	Calcium	14000	B	79	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	86-74-8	Carbazole	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Carbon Dioxide	4300	J B N		ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	75-15-0	Carbon Disulfide	20		15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	56-23-5	Carbon Tetrachloride	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	108-90-7	Chlorobenzene	19000	D	2200	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	124-48-1	Chlorodibromomethane	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	75-00-3	Chloroethane	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	67-66-3	Chloroform	15	U	15	ug/Kg

Appendix II-B3
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-2		3/21/2007	Field Sample	74-87-3	Chloromethane	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Cholesterol	1900	J N		ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-47-3	Chromium	17		1.6	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	218-01-9	Chrysene	130	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	156-59-2	cis-1,2-Dichloroethene	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	10061-01-5	cis-1,3-Dichloropropene	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-48-4	Cobalt	6.3		1.6	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-50-8	Copper	22		3.2	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	75-99-0	Dalapon	300	U	300	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	319-86-8	delta-BHC	3	U *	3	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Desmosterol	1100	J N		ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	53-70-3	Dibenzo(a,h)anthracene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	132-64-9	Dibenzofuran	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	1918-00-9	Dicamba	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	75-09-2	Dichloromethane	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	120-36-5	Dichlorprop	56		15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	60-57-1	Dieldrin	0.98	J P	5.8	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	84-66-2	Diethyl Phthalate	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	131-11-3	Dimethyl Phthalate	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	84-74-2	Di-n-butylphthalate	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	117-84-0	Di-n-octylphthalate	100	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	88-85-7	Dinoseb	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Diphenyl sulfone	1400	J N		ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	959-98-8	Endosulfan I	3	U	3	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	33213-65-9	Endosulfan II	5.8	U	5.8	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	1031-07-8	Endosulfan Sulfate	5.8	U	5.8	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	72-20-8	Endrin	5.8	U	5.8	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7421-93-4	Endrin Aldehyde	5.8	U	5.8	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	53494-70-5	Endrin Ketone	5.8	U	5.8	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	100-41-4	Ethylbenzene	8.4	J	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	206-44-0	Fluoranthene	260	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	86-73-7	Fluorene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	58-89-9	gamma-BHC (Lindane)	3	U	3	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	5103-74-2	gamma-Chlordane	3	U	3	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	76-44-8	Heptachlor	3	U	3	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	1024-57-3	Heptachlor Epoxide	3	U	3	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	118-74-1	Hexachlorobenzene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	87-68-3	Hexachlorobutadiene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	77-47-4	Hexachlorocyclopentadiene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	67-72-1	Hexachloroethane	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Hexadecanoic acid, hexadecyl ester	760	J N		ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	193-39-5	Indeno(1,2,3-cd)pyrene	71	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7439-89-6	Iron	15000		7.9	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	78-59-1	Isophorone	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7439-92-1	Lead	27	B	0.79	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7439-95-4	Magnesium	4100		79	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7439-96-5	Manganese	440		1.6	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	3500	U	3500	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	93-65-2	MCPP	3500	U	3500	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7439-97-6	Mercury	0.041		0.03	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	72-43-5	Methoxychlor	30	U	30	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Methyl acetate	23	J	29	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	591-78-6	Methyl N-Butyl Ketone	73	U	73	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	91-20-3	Naphthalene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-02-0	Nickel	16		6.3	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	98-95-3	Nitrobenzene	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	621-64-7	N-Nitroso-di-n-propylamine	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	86-30-6	N-Nitrosodiphenylamine	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Oxacycloheptadecan-2-one	1200	J N		ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	106-47-8	P-Chloroaniline	1900		1200	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	87-86-5	Pentachlorophenol	7.4	U	7.4	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Pentanal	56	J N		ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	85-01-8	Phenanthrene	170	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	108-95-2	Phenol	580	U	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Phytol	1100	J N		ug/Kg

Appendix II-B3
Results of Chemical Analysis of Sediments Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Analyte	Result	Qualifier	Reporting Limit	Units
SED-SA2-GMCS-2		3/21/2007	Field Sample	100-01-6	P-Nitroaniline	3000	U	3000	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-09-7	Potassium	1500		160	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Pregna-5,16-dien-20-one, 3-hydroxy-, (3.	1200	J N		ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		p-Xylene/m-Xylene	13	J	29	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	129-00-0	Pyrene	220	J	580	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7782-49-2	Selenium	3.9	U	3.9	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-22-4	Silver	1.6	U	1.6	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-23-5	Sodium	240	U	160	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample		Stigmasterol	1300	J N		ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	100-42-5	Styrene (Monomer)	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	127-18-4	Tetrachloroethene	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-28-0	Thallium	3.9	U	3.9	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	108-88-3	Toluene	200		15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	8001-35-2	Toxaphene	300	U	300	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	156-60-5	trans-1,2-Dichloroethene	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	10061-02-6	trans-1,3-Dichloropropene	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	79-01-6	Trichloroethene	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-62-2	Vanadium	26		1.6	mg/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	75-01-4	Vinyl chloride	15	U	15	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	1330-20-7	Xylenes, Total	18	J	29	ug/Kg
SED-SA2-GMCS-2		3/21/2007	Field Sample	7440-66-6	Zinc	370		3.2	mg/Kg

Appendix II-C1

Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AU1W		11/16/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R1AU1W		11/16/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R1AU1W		11/16/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R1AU1W		11/16/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R1AU1W		11/16/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R1AU1W		11/16/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R1AU1W		11/16/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R1AU1W		11/16/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R1AU1W		11/16/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R1AU1W		11/16/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R1AU1W		11/16/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R1AU1W		11/16/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R1AU1W		11/16/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R1AU1W		11/16/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R1AU1W		11/16/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R1AU1W		11/16/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R1AU1W		11/16/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R1AU1W		11/16/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R1AU1W		11/16/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R1AU1W		11/16/2002	Sample	7429-90-5	T	Aluminum	0.58		0.02	mg/l
R1AU1W		11/16/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R1AU1W		11/16/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R1AU1W		11/16/2002	Sample	7440-39-3	T	Barium	0.055		0.01	mg/l
R1AU1W		11/16/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R1AU1W		11/16/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R1AU1W		11/16/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R1AU1W		11/16/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R1AU1W		11/16/2002	Sample	7440-70-2	T	Calcium	49		0.5	mg/l
R1AU1W		11/16/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AU1W		11/16/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R1AU1W		11/16/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R1AU1W		11/16/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R1AU1W		11/16/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R1AU1W		11/16/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R1AU1W		11/16/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R1AU1W		11/16/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R1AU1W		11/16/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R1AU1W		11/16/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R1AU1W		11/16/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R1AU1W		11/16/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R1AU1W		11/16/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R1AU1W		11/16/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R1AU1W		11/16/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R1AU1W		11/16/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R1AU1W		11/16/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R1AU1W		11/16/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R1AU1W		11/16/2002	Sample	5	T	Endrin Ketone	0.015	J	0.1	ug/l
R1AU1W		11/16/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R1AU1W		11/16/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R1AU1W		11/16/2002	Sample	E-11778	T	Hardness, Carbonate	200	U	200	Ca
R1AU1W		11/16/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R1AU1W		11/16/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R1AU1W		11/16/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R1AU1W		11/16/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R1AU1W		11/16/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	7439-89-6	T	Iron	0.83		0.05	mg/l
R1AU1W		11/16/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R1AU1W		11/16/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R1AU1W		11/16/2002	Sample	7439-96-5	T	Manganese	0.078		0.01	mg/l
R1AU1W		11/16/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R1AU1W		11/16/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R1AU1W		11/16/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R1AU1W		11/16/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R1AU1W		11/16/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R1AU1W		11/16/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R1AU1W		11/16/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R1AU1W		11/16/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R1AU1W		11/16/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R1AU1W		11/16/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R1AU1W		11/16/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R1AU1W		11/16/2002	Sample	7440-09-7	T	Potassium	3.2		0.01	mg/l
R1AU1W		11/16/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R1AU1W		11/16/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R1AU1W		11/16/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AU1W		11/16/2002	Sample	7440-23-5	T	Sodium	17		80	mg/l
R1AU1W		11/16/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R1AU1W		11/16/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R1AU1W		11/16/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R1AU1W		11/16/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R1AU1W		11/16/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R1AU1W		11/16/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R1AU1W		11/16/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R1AU1W		11/16/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-39-3	D	Barium	0.049		0.01	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-70-2	D	Calcium	49		0.5	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7439-89-6	D	Iron	0.029	J	0.05	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-09-7	D	Potassium	3.1		0.01	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-23-5	D	Sodium	17		80	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R1AU1W-Filtered	R1AU1W	11/16/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R1BU1W		11/17/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R1BU1W		11/17/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R1BU1W		11/17/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R1BU1W		11/17/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R1BU1W		11/17/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R1BU1W		11/17/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R1BU1W		11/17/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R1BU1W		11/17/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R1BU1W		11/17/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R1BU1W		11/17/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R1BU1W		11/17/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R1BU1W		11/17/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R1BU1W		11/17/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BU1W		11/17/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R1BU1W		11/17/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R1BU1W		11/17/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R1BU1W		11/17/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R1BU1W		11/17/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R1BU1W		11/17/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R1BU1W		11/17/2002	Sample	7429-90-5	T	Aluminum	0.66	J	0.02	mg/l
R1BU1W		11/17/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R1BU1W		11/17/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R1BU1W		11/17/2002	Sample	7440-39-3	T	Barium	0.059		0.01	mg/l
R1BU1W		11/17/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R1BU1W		11/17/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R1BU1W		11/17/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R1BU1W		11/17/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R1BU1W		11/17/2002	Sample	7440-70-2	T	Calcium	50		0.5	mg/l
R1BU1W		11/17/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R1BU1W		11/17/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	75-00-3	T	Chloroethane	1	UJ	1	ug/l
R1BU1W		11/17/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R1BU1W		11/17/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R1BU1W		11/17/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R1BU1W		11/17/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R1BU1W		11/17/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R1BU1W		11/17/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R1BU1W		11/17/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R1BU1W		11/17/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R1BU1W		11/17/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R1BU1W		11/17/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R1BU1W		11/17/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R1BU1W		11/17/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R1BU1W		11/17/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R1BU1W		11/17/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R1BU1W		11/17/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R1BU1W		11/17/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R1BU1W		11/17/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R1BU1W		11/17/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R1BU1W		11/17/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R1BU1W		11/17/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R1BU1W		11/17/2002	Sample	E-11778	T	Hardness, Carbonate	220		200	Ca

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BU1W		11/17/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R1BU1W		11/17/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R1BU1W		11/17/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R1BU1W		11/17/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R1BU1W		11/17/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	7439-89-6	T	Iron	0.92		0.05	mg/l
R1BU1W		11/17/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R1BU1W		11/17/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R1BU1W		11/17/2002	Sample	7439-96-5	T	Manganese	0.077		0.01	mg/l
R1BU1W		11/17/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R1BU1W		11/17/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R1BU1W		11/17/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R1BU1W		11/17/2002	Sample	72-43-5	T	Methoxychlor	0.5	UJ	0.5	ug/l
R1BU1W		11/17/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R1BU1W		11/17/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R1BU1W		11/17/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R1BU1W		11/17/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R1BU1W		11/17/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R1BU1W		11/17/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R1BU1W		11/17/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R1BU1W		11/17/2002	Sample	7440-09-7	T	Potassium	3.2		0.01	mg/l
R1BU1W		11/17/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R1BU1W		11/17/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R1BU1W		11/17/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R1BU1W		11/17/2002	Sample	7440-23-5	T	Sodium	20		80	mg/l
R1BU1W		11/17/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R1BU1W		11/17/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R1BU1W		11/17/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R1BU1W		11/17/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R1BU1W		11/17/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	7440-62-2	T	Vanadium	0.0033	J	0.01	mg/l
R1BU1W		11/17/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R1BU1W		11/17/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R1BU1W		11/17/2002	Sample	7440-66-6	T	Zinc	0.0046	J	0.02	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7429-90-5	D	Aluminum	0.2	UJ	0.2	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-38-2	D	Arsenic	0.005	J	0.01	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-39-3	D	Barium	0.051		0.01	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7439-89-6	D	Iron	0.05	U	0.05	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-09-7	D	Potassium	3.1		0.01	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-23-5	D	Sodium	20		80	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-62-2	D	Vanadium	0.0017	J	0.01	mg/l
R1BU1W-Filtered	R1BU1W	11/17/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AM1W		11/15/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R1AM1W		11/15/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R1AM1W		11/15/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R1AM1W		11/15/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R1AM1W		11/15/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R1AM1W		11/15/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R1AM1W		11/15/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R1AM1W		11/15/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R1AM1W		11/15/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R1AM1W		11/15/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R1AM1W		11/15/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R1AM1W		11/15/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R1AM1W		11/15/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R1AM1W		11/15/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R1AM1W		11/15/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R1AM1W		11/15/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R1AM1W		11/15/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R1AM1W		11/15/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R1AM1W		11/15/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R1AM1W		11/15/2002	Sample	7429-90-5	T	Aluminum	0.62		0.02	mg/l
R1AM1W		11/15/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R1AM1W		11/15/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R1AM1W		11/15/2002	Sample	7440-39-3	T	Barium	0.06		0.01	mg/l
R1AM1W		11/15/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R1AM1W		11/15/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R1AM1W		11/15/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R1AM1W		11/15/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R1AM1W		11/15/2002	Sample	7440-70-2	T	Calcium	53		0.5	mg/l
R1AM1W		11/15/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AM1W		11/15/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R1AM1W		11/15/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R1AM1W		11/15/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	7440-48-4	T	Cobalt	0.0011	J	0.01	mg/l
R1AM1W		11/15/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R1AM1W		11/15/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R1AM1W		11/15/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R1AM1W		11/15/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R1AM1W		11/15/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R1AM1W		11/15/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R1AM1W		11/15/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R1AM1W		11/15/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R1AM1W		11/15/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R1AM1W		11/15/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R1AM1W		11/15/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R1AM1W		11/15/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R1AM1W		11/15/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R1AM1W		11/15/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R1AM1W		11/15/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R1AM1W		11/15/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R1AM1W		11/15/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R1AM1W		11/15/2002	Sample	E-11778	T	Hardness, Carbonate	240		200	Ca
R1AM1W		11/15/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R1AM1W		11/15/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R1AM1W		11/15/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R1AM1W		11/15/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R1AM1W		11/15/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	7439-89-6	T	Iron	0.9		0.05	mg/l
R1AM1W		11/15/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R1AM1W		11/15/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R1AM1W		11/15/2002	Sample	7439-96-5	T	Manganese	0.084		0.01	mg/l
R1AM1W		11/15/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R1AM1W		11/15/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R1AM1W		11/15/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R1AM1W		11/15/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R1AM1W		11/15/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R1AM1W		11/15/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R1AM1W		11/15/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R1AM1W		11/15/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R1AM1W		11/15/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R1AM1W		11/15/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R1AM1W		11/15/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R1AM1W		11/15/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R1AM1W		11/15/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R1AM1W		11/15/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R1AM1W		11/15/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AM1W		11/15/2002	Sample	7440-23-5	T	Sodium	19		80	mg/l
R1AM1W		11/15/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R1AM1W		11/15/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R1AM1W		11/15/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R1AM1W		11/15/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R1AM1W		11/15/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R1AM1W		11/15/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R1AM1W		11/15/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R1AM1W		11/15/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-39-3	D	Barium	0.049		0.01	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7439-89-6	D	Iron	0.032	J	0.05	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-09-7	D	Potassium	3.2		0.01	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-23-5	D	Sodium	19		80	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-62-2	D	Vanadium	0.0013	J	0.01	mg/l
R1AM1W-Filtered	R1AM1W	11/15/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R1BM1W		11/16/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R1BM1W		11/16/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R1BM1W		11/15/2002	Sample	9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	1.5E-06	U	0.0000015	ug/l
R1BM1W		11/15/2002	Sample	4	T	1,2,3,4,6,7,8-HpCDF	8.8E-07	U	8.8E-07	ug/l
R1BM1W		11/15/2002	Sample	7	T	1,2,3,4,7,8,9-HpCDF	1E-06	U	0.000001	ug/l
R1BM1W		11/15/2002	Sample	6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	8.7E-07	U	8.7E-07	ug/l
R1BM1W		11/15/2002	Sample	9	T	1,2,3,4,7,8-HxCDF	7.4E-07	U	7.4E-07	ug/l
R1BM1W		11/15/2002	Sample	7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	8.2E-07	U	8.2E-07	ug/l
R1BM1W		11/15/2002	Sample	9	T	1,2,3,6,7,8-HxCDF	6.7E-07	U	6.7E-07	ug/l
R1BM1W		11/15/2002	Sample	3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	7.6E-07	U	7.6E-07	ug/l
R1BM1W		11/15/2002	Sample	9	T	1,2,3,7,8,9-HxCDF	8.3E-07	U	8.3E-07	ug/l
R1BM1W		11/15/2002	Sample	6	T	1,2,3,7,8-Pentachlorodibenzofuran	6.4E-07	U	6.4E-07	ug/l
R1BM1W		11/15/2002	Sample	4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	1.4E-06	U	0.0000014	ug/l
R1BM1W		11/16/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R1BM1W		11/16/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R1BM1W		11/15/2002	Sample	5	T	2,3,4,6,7,8-HxCDF	7.6E-07	U	7.6E-07	ug/l
R1BM1W		11/15/2002	Sample	4	T	2,3,4,7,8-PeCDF	6.2E-07	U	6.2E-07	ug/l
R1BM1W		11/15/2002	Sample	1746-01-6	T	2,3,7,8-TCDD	7.7E-07	U	7.7E-07	ug/l
R1BM1W		11/15/2002	Sample	9	T	2,3,7,8-Tetrachlorodibenzofuran	1.5E-06	U	0.0000015	ug/l
R1BM1W		11/16/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R1BM1W		11/16/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R1BM1W		11/16/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R1BM1W		11/16/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R1BM1W		11/16/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM1W		11/16/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R1BM1W		11/16/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R1BM1W		11/16/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R1BM1W		11/16/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R1BM1W		11/16/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R1BM1W		11/16/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R1BM1W		11/16/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R1BM1W		11/16/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R1BM1W		11/16/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R1BM1W		11/16/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R1BM1W		11/16/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R1BM1W		11/16/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R1BM1W		11/16/2002	Sample	7429-90-5	T	Aluminum	0.62		0.02	mg/l
R1BM1W		11/16/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R1BM1W		11/16/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R1BM1W		11/16/2002	Sample	7440-39-3	T	Barium	0.056		0.01	mg/l
R1BM1W		11/16/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R1BM1W		11/16/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R1BM1W		11/16/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R1BM1W		11/16/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R1BM1W		11/16/2002	Sample	7440-70-2	T	Calcium	49		0.5	mg/l
R1BM1W		11/16/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R1BM1W		11/16/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R1BM1W		11/16/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R1BM1W		11/16/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R1BM1W		11/16/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R1BM1W		11/16/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R1BM1W		11/16/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R1BM1W		11/16/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R1BM1W		11/16/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R1BM1W		11/16/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R1BM1W		11/16/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R1BM1W		11/16/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R1BM1W		11/16/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R1BM1W		11/16/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM1W		11/16/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R1BM1W		11/16/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R1BM1W		11/16/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R1BM1W		11/16/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R1BM1W		11/16/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R1BM1W		11/16/2002	Sample	5	T	Endrin Ketone	0.016	J	0.1	ug/l
R1BM1W		11/16/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R1BM1W		11/16/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R1BM1W		11/16/2002	Sample	E-11778	T	Hardness, Carbonate	210	U	210	Ca
R1BM1W		11/16/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R1BM1W		11/16/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R1BM1W		11/16/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R1BM1W		11/16/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R1BM1W		11/16/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	7439-89-6	T	Iron	0.91		0.05	mg/l
R1BM1W		11/16/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R1BM1W		11/16/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R1BM1W		11/16/2002	Sample	7439-96-5	T	Manganese	0.08		0.01	mg/l
R1BM1W		11/16/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R1BM1W		11/16/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R1BM1W		11/16/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R1BM1W		11/16/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R1BM1W		11/16/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R1BM1W		11/16/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R1BM1W		11/16/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R1BM1W		11/15/2002	Sample	3268-87-9	T	OCDD	0.00004	U	0.00004	ug/l
R1BM1W		11/15/2002	Sample	0	T	OCDF	1.1E-06	U	0.0000011	ug/l
R1BM1W		11/16/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R1BM1W		11/16/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R1BM1W		11/16/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R1BM1W		11/16/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R1BM1W		11/16/2002	Sample	7440-09-7	T	Potassium	3.2		0.01	mg/l
R1BM1W		11/16/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R1BM1W		11/16/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R1BM1W		11/16/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R1BM1W		11/16/2002	Sample	7440-23-5	T	Sodium	17		80	mg/l
R1BM1W		11/16/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R1BM1W		11/16/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R1BM1W		11/16/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R1BM1W		11/15/2002	Sample	4	T	Total HpCDD	1.5E-06	U	0.0000015	ug/l
R1BM1W		11/15/2002	Sample	3	T	Total HpCDF	1E-06	U	0.000001	ug/l
R1BM1W		11/15/2002	Sample	8	T	Total HxCDD	1.6E-06	U	0.0000016	ug/l
R1BM1W		11/15/2002	Sample	1	T	Total HxCDF	8.3E-07	U	8.3E-07	ug/l
R1BM1W		11/15/2002	Sample	9	T	Total PeCDD	1.4E-06	U	0.0000014	ug/l
R1BM1W		11/15/2002	Sample	4	T	Total PeCDF	9.5E-07	U	9.5E-07	ug/l
R1BM1W		11/15/2002	Sample	5	T	Total TCDD	8.4E-07	U	8.4E-07	ug/l
R1BM1W		11/15/2002	Sample	5	T	Total TCDF	1.5E-06	U	0.0000015	ug/l
R1BM1W		11/16/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R1BM1W		11/16/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R1BM1W		11/16/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R1BM1W		11/16/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R1BM1W		11/16/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM1W		11/16/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R1BM1W		11/16/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-39-3	D	Barium	0.05		0.01	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7439-89-6	D	Iron	0.028	J	0.05	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-09-7	D	Potassium	3.2		0.01	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-23-5	D	Sodium	17		80	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-62-2	D	Vanadium	0.0014	J	0.01	mg/l
R1BM1W-Filtered	R1BM1W	11/16/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	2.2E-06	U	0.0000022	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	4	T	1,2,3,4,6,7,8-HpCDF	1.4E-06	U	0.0000014	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7	T	1,2,3,4,7,8,9-HpCDF	1.4E-06	U	0.0000014	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	1.2E-06	U	0.0000012	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	9	T	1,2,3,4,7,8-HxCDF	1.8E-06	U	0.0000018	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	1.1E-06	U	0.0000011	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	9	T	1,2,3,6,7,8-HxCDF	1.1E-06	U	0.0000011	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	1.6E-06	U	0.0000016	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	9	T	1,2,3,7,8,9-HxCDF	1.6E-06	U	0.0000016	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	6	T	1,2,3,7,8-Pentachlorodibenzofuran	1.7E-06	U	0.0000017	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	2.2E-06	U	0.0000022	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	5	T	2,3,4,6,7,8-HxCDF	1.2E-06	U	0.0000012	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	4	T	2,3,4,7,8-PeCDF	1.6E-06	U	0.0000016	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	1746-01-6	T	2,3,7,8-TCDD	9.3E-07	U	9.3E-07	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	9	T	2,3,7,8-Tetrachlorodibenzofuran	2.4E-06	U	0.0000024	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM2W	R1BM1W	11/15/2002	Duplicate	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	83-32-9	T	Acenaphthene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	67-64-1	T	Acetone	25	U	25	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7429-90-5	T	Aluminum	0.8		0.02	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	120-12-7	T	Anthracene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-39-3	T	Barium	0.058		0.01	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	71-43-2	T	Benzene	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	117-81-7	T	bis(2-Ethylhexyl)phthalate	14	J	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	75-25-2	T	Bromoform	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	74-83-9	T	Bromomethane	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-70-2	T	Calcium	50		0.5	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	86-74-8	T	Carbazole	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	75-00-3	T	Chloroethane	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	67-66-3	T	Chloroform	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	218-01-9	T	Chrysene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	75-99-0	T	Dalapon	120	U	120	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	75-09-2	T	Dichloromethane	5	U	5	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	120-36-5	T	Dichlorprop	6	U	6	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	88-85-7	T	Dinoseb	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	9	T	Endosulfan II	0.1	U	0.1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	5	T	Endrin Ketone	0.015	J	0.1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	206-44-0	T	Fluoranthene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	86-73-7	T	Fluorene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM2W	R1BM1W	11/15/2002	Duplicate	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	E-11778	T	Hardness, Carbonate	210	U	210	Ca
R1BM2W	R1BM1W	11/15/2002	Duplicate	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7439-89-6	T	Iron	1		0.05	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	78-59-1	T	Isophorone	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7439-95-4	T	Magnesium	20		0.5	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7439-96-5	T	Manganese	0.083		0.01	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	93-65-2	T	MCPP	120	U	120	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	91-20-3	T	Naphthalene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	3268-87-9	T	OCDD	3.3E-05	U	0.000033	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	0	T	OCDF	2.9E-06	U	0.0000029	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	85-01-8	T	Phenanthrene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	108-95-2	T	Phenol	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-09-7	T	Potassium	3.3		0.01	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	129-00-0	T	Pyrene	10	U	10	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-23-5	T	Sodium	17		80	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	108-88-3	T	Toluene	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	4	T	Total HpCDD	2.2E-06	U	0.0000022	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	3	T	Total HpCDF	1.4E-06	U	0.0000014	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	8	T	Total HxCDD	1.8E-06	U	0.0000018	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	1	T	Total HxCDF	1.8E-06	U	0.0000018	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	9	T	Total PeCDD	2.2E-06	U	0.0000022	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	4	T	Total PeCDF	1.8E-06	U	0.0000018	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	5	T	Total TCDD	9.3E-07	U	9.3E-07	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	5	T	Total TCDF	2.4E-06	U	0.0000024	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	8001-35-2	T	Toxaphene	5	U	5	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R1BM2W	R1BM1W	11/15/2002	Duplicate	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-39-3	D	Barium	0.049		0.01	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-70-2	D	Calcium	50		0.5	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-50-8	D	Copper	0.02	U	0.02	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7439-89-6	D	Iron	0.022	J	0.05	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7439-95-4	D	Magnesium	20		0.5	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-09-7	D	Potassium	3.2		0.01	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-23-5	D	Sodium	17		80	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R1BM2W-Filtered	R1BM2W	11/15/2002	Duplicate	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R1CM1W		11/16/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R1CM1W		11/16/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R1CM1W		11/16/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R1CM1W		11/16/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R1CM1W		11/16/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R1CM1W		11/16/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R1CM1W		11/16/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R1CM1W		11/16/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R1CM1W		11/16/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R1CM1W		11/16/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R1CM1W		11/16/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R1CM1W		11/16/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R1CM1W		11/16/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R1CM1W		11/16/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R1CM1W		11/16/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R1CM1W		11/16/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R1CM1W		11/16/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R1CM1W		11/16/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R1CM1W		11/16/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R1CM1W		11/16/2002	Sample	7429-90-5	T	Aluminum	0.69		0.02	mg/l
R1CM1W		11/16/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R1CM1W		11/16/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R1CM1W		11/16/2002	Sample	7440-39-3	T	Barium	0.059		0.01	mg/l
R1CM1W		11/16/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1CM1W		11/16/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R1CM1W		11/16/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R1CM1W		11/16/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R1CM1W		11/16/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R1CM1W		11/16/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R1CM1W		11/16/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R1CM1W		11/16/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R1CM1W		11/16/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R1CM1W		11/16/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R1CM1W		11/16/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R1CM1W		11/16/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R1CM1W		11/16/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R1CM1W		11/16/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R1CM1W		11/16/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R1CM1W		11/16/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R1CM1W		11/16/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R1CM1W		11/16/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R1CM1W		11/16/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R1CM1W		11/16/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R1CM1W		11/16/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R1CM1W		11/16/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R1CM1W		11/16/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R1CM1W		11/16/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R1CM1W		11/16/2002	Sample	5	T	Endrin Ketone	0.016	J	0.1	ug/l
R1CM1W		11/16/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R1CM1W		11/16/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R1CM1W		11/16/2002	Sample	E-11778	T	Hardness, Carbonate	200	U	200	Ca
R1CM1W		11/16/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R1CM1W		11/16/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R1CM1W		11/16/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R1CM1W		11/16/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R1CM1W		11/16/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	7439-89-6	T	Iron	0.98		0.05	mg/l
R1CM1W		11/16/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R1CM1W		11/16/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R1CM1W		11/16/2002	Sample	7439-96-5	T	Manganese	0.082		0.01	mg/l
R1CM1W		11/16/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R1CM1W		11/16/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R1CM1W		11/16/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R1CM1W		11/16/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R1CM1W		11/16/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R1CM1W		11/16/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R1CM1W		11/16/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1CM1W		11/16/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R1CM1W		11/16/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R1CM1W		11/16/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R1CM1W		11/16/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R1CM1W		11/16/2002	Sample	87-86-5	T	Pentachlorophenol	0.3	J	1	ug/l
R1CM1W		11/16/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R1CM1W		11/16/2002	Sample	7440-09-7	T	Potassium	3.4		0.01	mg/l
R1CM1W		11/16/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R1CM1W		11/16/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R1CM1W		11/16/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R1CM1W		11/16/2002	Sample	7440-23-5	T	Sodium	18		80	mg/l
R1CM1W		11/16/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R1CM1W		11/16/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	7440-28-0	T	Thallium	0.0052	J	0.01	mg/l
R1CM1W		11/16/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R1CM1W		11/16/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R1CM1W		11/16/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R1CM1W		11/16/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R1CM1W		11/16/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R1CM1W		11/16/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-39-3	D	Barium	0.05		0.01	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7439-89-6	D	Iron	0.029	J	0.05	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-09-7	D	Potassium	3.2		0.01	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-23-5	D	Sodium	17		80	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-62-2	D	Vanadium	0.0013	J	0.01	mg/l
R1CM1W-Filtered	R1CM1W	11/16/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R1AD1W		11/15/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R1AD1W		11/15/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R1AD1W		11/15/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R1AD1W		11/15/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R1AD1W		11/15/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R1AD1W		11/15/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R1AD1W		11/15/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R1AD1W		11/15/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AD1W		11/15/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R1AD1W		11/15/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R1AD1W		11/15/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R1AD1W		11/15/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R1AD1W		11/15/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R1AD1W		11/15/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R1AD1W		11/15/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R1AD1W		11/15/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R1AD1W		11/15/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R1AD1W		11/15/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R1AD1W		11/15/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R1AD1W		11/15/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R1AD1W		11/15/2002	Sample	7429-90-5	T	Aluminum	0.79		0.02	mg/l
R1AD1W		11/15/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R1AD1W		11/15/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R1AD1W		11/15/2002	Sample	7440-39-3	T	Barium	0.06		0.01	mg/l
R1AD1W		11/15/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R1AD1W		11/15/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R1AD1W		11/15/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R1AD1W		11/15/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R1AD1W		11/15/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R1AD1W		11/15/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R1AD1W		11/15/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	74-87-3	T	Chloromethane	0.5	UJ	0.5	ug/l
R1AD1W		11/15/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R1AD1W		11/15/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R1AD1W		11/15/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R1AD1W		11/15/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R1AD1W		11/15/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R1AD1W		11/15/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R1AD1W		11/15/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R1AD1W		11/15/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R1AD1W		11/15/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R1AD1W		11/15/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R1AD1W		11/15/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R1AD1W		11/15/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AD1W		11/15/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R1AD1W		11/15/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R1AD1W		11/15/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R1AD1W		11/15/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R1AD1W		11/15/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R1AD1W		11/15/2002	Sample	5	T	Endrin Ketone	0.024	J	0.1	ug/l
R1AD1W		11/15/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R1AD1W		11/15/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R1AD1W		11/15/2002	Sample	E-11778	T	Hardness, Carbonate	180		200	Ca
R1AD1W		11/15/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R1AD1W		11/15/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R1AD1W		11/15/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R1AD1W		11/15/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R1AD1W		11/15/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l
R1AD1W		11/15/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R1AD1W		11/15/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R1AD1W		11/15/2002	Sample	7439-96-5	T	Manganese	0.082		0.01	mg/l
R1AD1W		11/15/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R1AD1W		11/15/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R1AD1W		11/15/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R1AD1W		11/15/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R1AD1W		11/15/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R1AD1W		11/15/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R1AD1W		11/15/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R1AD1W		11/15/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R1AD1W		11/15/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R1AD1W		11/15/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R1AD1W		11/15/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R1AD1W		11/15/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R1AD1W		11/15/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R1AD1W		11/15/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R1AD1W		11/15/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R1AD1W		11/15/2002	Sample	7440-23-5	T	Sodium	19		80	mg/l
R1AD1W		11/15/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R1AD1W		11/15/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R1AD1W		11/15/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R1AD1W		11/15/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R1AD1W		11/15/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R1AD1W		11/15/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R1AD1W		11/15/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R1AD1W		11/15/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-38-2	D	Arsenic	0.1	U	0.1	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-39-3	D	Barium	0.05		0.01	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7439-89-6	D	Iron	0.029	J	0.05	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-09-7	D	Potassium	3.3		0.01	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-23-5	D	Sodium	19		80	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-62-2	D	Vanadium	0.0016	J	0.01	mg/l
R1AD1W-Filtered	R1AD1W	11/15/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R1BD1W		11/15/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R1BD1W		11/15/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R1BD1W		11/15/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R1BD1W		11/15/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R1BD1W		11/15/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R1BD1W		11/15/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R1BD1W		11/15/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R1BD1W		11/15/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R1BD1W		11/15/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R1BD1W		11/15/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R1BD1W		11/15/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R1BD1W		11/15/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R1BD1W		11/15/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R1BD1W		11/15/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R1BD1W		11/15/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R1BD1W		11/15/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R1BD1W		11/15/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R1BD1W		11/15/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R1BD1W		11/15/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R1BD1W		11/15/2002	Sample	7429-90-5	T	Aluminum	0.88		0.02	mg/l
R1BD1W		11/15/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R1BD1W		11/15/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R1BD1W		11/15/2002	Sample	7440-39-3	T	Barium	0.061		0.01	mg/l
R1BD1W		11/15/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BD1W		11/15/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R1BD1W		11/15/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R1BD1W		11/15/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R1BD1W		11/15/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R1BD1W		11/15/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R1BD1W		11/15/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R1BD1W		11/15/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	74-87-3	T	Chloromethane	0.5	J	0.5	ug/l
R1BD1W		11/15/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R1BD1W		11/15/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R1BD1W		11/15/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R1BD1W		11/15/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R1BD1W		11/15/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R1BD1W		11/15/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R1BD1W		11/15/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R1BD1W		11/15/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R1BD1W		11/15/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R1BD1W		11/15/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R1BD1W		11/15/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R1BD1W		11/15/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R1BD1W		11/15/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R1BD1W		11/15/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R1BD1W		11/15/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R1BD1W		11/15/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R1BD1W		11/15/2002	Sample	5	T	Endrin Ketone	0.023	J	0.1	ug/l
R1BD1W		11/15/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R1BD1W		11/15/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R1BD1W		11/15/2002	Sample	E-11778	T	Hardness, Carbonate	190		200	Ca
R1BD1W		11/15/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R1BD1W		11/15/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R1BD1W		11/15/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R1BD1W		11/15/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R1BD1W		11/15/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l
R1BD1W		11/15/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R1BD1W		11/15/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R1BD1W		11/15/2002	Sample	7439-96-5	T	Manganese	0.084		0.01	mg/l
R1BD1W		11/15/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R1BD1W		11/15/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R1BD1W		11/15/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R1BD1W		11/15/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R1BD1W		11/15/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R1BD1W		11/15/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R1BD1W		11/15/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BD1W		11/15/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R1BD1W		11/15/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R1BD1W		11/15/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R1BD1W		11/15/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R1BD1W		11/15/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R1BD1W		11/15/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R1BD1W		11/15/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R1BD1W		11/15/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R1BD1W		11/15/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R1BD1W		11/15/2002	Sample	7440-23-5	T	Sodium	19		80	mg/l
R1BD1W		11/15/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R1BD1W		11/15/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R1BD1W		11/15/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R1BD1W		11/15/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R1BD1W		11/15/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R1BD1W		11/15/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R1BD1W		11/15/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R1BD1W		11/15/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-39-3	D	Barium	0.049		0.01	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7439-89-6	D	Iron	0.03	J	0.05	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-09-7	D	Potassium	3.2		0.01	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-23-5	D	Sodium	18		80	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R1BD1W-Filtered	R1BD1W	11/15/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R2AU1W		11/14/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R2AU1W		11/14/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R2AU1W		11/14/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R2AU1W		11/14/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R2AU1W		11/14/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R2AU1W		11/14/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R2AU1W		11/14/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R2AU1W		11/14/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AU1W		11/14/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R2AU1W		11/14/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R2AU1W		11/14/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R2AU1W		11/14/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R2AU1W		11/14/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R2AU1W		11/14/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R2AU1W		11/14/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R2AU1W		11/14/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R2AU1W		11/14/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R2AU1W		11/14/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R2AU1W		11/14/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R2AU1W		11/14/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R2AU1W		11/14/2002	Sample	7429-90-5	T	Aluminum	0.68		0.02	mg/l
R2AU1W		11/14/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R2AU1W		11/14/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R2AU1W		11/14/2002	Sample	7440-39-3	T	Barium	0.06		0.01	mg/l
R2AU1W		11/14/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R2AU1W		11/14/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R2AU1W		11/14/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R2AU1W		11/14/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	74-83-9	T	Bromomethane (Methyl bromide)	1	R	1	ug/l
R2AU1W		11/14/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R2AU1W		11/14/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R2AU1W		11/14/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R2AU1W		11/14/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R2AU1W		11/14/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R2AU1W		11/14/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R2AU1W		11/14/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R2AU1W		11/14/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R2AU1W		11/14/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	UJ	0.5	ug/l
R2AU1W		11/14/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R2AU1W		11/14/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R2AU1W		11/14/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	UJ	0.1	ug/l
R2AU1W		11/14/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R2AU1W		11/14/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R2AU1W		11/14/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R2AU1W		11/14/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AU1W		11/14/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R2AU1W		11/14/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R2AU1W		11/14/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R2AU1W		11/14/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R2AU1W		11/14/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R2AU1W		11/14/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R2AU1W		11/14/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R2AU1W		11/14/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R2AU1W		11/14/2002	Sample	E-11778	T	Hardness, Carbonate	230		200	Ca
R2AU1W		11/14/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R2AU1W		11/14/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R2AU1W		11/14/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	UJ	0.3	ug/l
R2AU1W		11/14/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	UJ	0.2	ug/l
R2AU1W		11/14/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	7439-89-6	T	Iron	0.97		0.05	mg/l
R2AU1W		11/14/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R2AU1W		11/14/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R2AU1W		11/14/2002	Sample	7439-96-5	T	Manganese	0.083		0.01	mg/l
R2AU1W		11/14/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R2AU1W		11/14/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R2AU1W		11/14/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R2AU1W		11/14/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R2AU1W		11/14/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	UJ	0.1	ug/l
R2AU1W		11/14/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R2AU1W		11/14/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	UJ	0.5	ug/l
R2AU1W		11/14/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	UJ	0.3	ug/l
R2AU1W		11/14/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R2AU1W		11/14/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	UJ	0.2	ug/l
R2AU1W		11/14/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R2AU1W		11/14/2002	Sample	7440-09-7	T	Potassium	3.4		0.01	mg/l
R2AU1W		11/14/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R2AU1W		11/14/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R2AU1W		11/14/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R2AU1W		11/14/2002	Sample	7440-23-5	T	Sodium	20	J	80	mg/l
R2AU1W		11/14/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	UJ	0.2	ug/l
R2AU1W		11/14/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R2AU1W		11/14/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R2AU1W		11/14/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	UJ	0.1	ug/l
R2AU1W		11/14/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R2AU1W		11/14/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R2AU1W		11/14/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R2AU1W		11/14/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-39-3	D	Barium	0.05		0.01	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7439-89-6	D	Iron	0.05	U	0.05	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-09-7	D	Potassium	3.2		0.01	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-23-5	D	Sodium	20	J	80	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R2AU1W-Filtered	R2AU1W	11/14/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R2BU1W		11/15/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R2BU1W		11/15/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R2BU1W		11/15/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R2BU1W		11/15/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R2BU1W		11/15/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R2BU1W		11/15/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R2BU1W		11/15/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R2BU1W		11/15/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R2BU1W		11/15/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R2BU1W		11/15/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R2BU1W		11/15/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R2BU1W		11/15/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R2BU1W		11/15/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R2BU1W		11/15/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R2BU1W		11/15/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R2BU1W		11/15/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R2BU1W		11/15/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R2BU1W		11/15/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R2BU1W		11/15/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R2BU1W		11/15/2002	Sample	7429-90-5	T	Aluminum	0.69		0.02	mg/l
R2BU1W		11/15/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R2BU1W		11/15/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R2BU1W		11/15/2002	Sample	7440-39-3	T	Barium	0.058		0.01	mg/l
R2BU1W		11/15/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BU1W		11/15/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R2BU1W		11/15/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R2BU1W		11/15/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R2BU1W		11/15/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R2BU1W		11/15/2002	Sample	7440-70-2	T	Calcium	51		0.5	mg/l
R2BU1W		11/15/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R2BU1W		11/15/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	74-87-3	T	Chloromethane	0.57	J	0.5	ug/l
R2BU1W		11/15/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R2BU1W		11/15/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	7440-48-4	T	Cobalt	0.001	J	0.01	mg/l
R2BU1W		11/15/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R2BU1W		11/15/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R2BU1W		11/15/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R2BU1W		11/15/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R2BU1W		11/15/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R2BU1W		11/15/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R2BU1W		11/15/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R2BU1W		11/15/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R2BU1W		11/15/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R2BU1W		11/15/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R2BU1W		11/15/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R2BU1W		11/15/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R2BU1W		11/15/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R2BU1W		11/15/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R2BU1W		11/15/2002	Sample	5	T	Endrin Ketone	0.019	J	0.1	ug/l
R2BU1W		11/15/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R2BU1W		11/15/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R2BU1W		11/15/2002	Sample	E-11778	T	Hardness, Carbonate	220		200	Ca
R2BU1W		11/15/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R2BU1W		11/15/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R2BU1W		11/15/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R2BU1W		11/15/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R2BU1W		11/15/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	7439-89-6	T	Iron	0.93		0.05	mg/l
R2BU1W		11/15/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R2BU1W		11/15/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R2BU1W		11/15/2002	Sample	7439-96-5	T	Manganese	0.08		0.01	mg/l
R2BU1W		11/15/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R2BU1W		11/15/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R2BU1W		11/15/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R2BU1W		11/15/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R2BU1W		11/15/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R2BU1W		11/15/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R2BU1W		11/15/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BU1W		11/15/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R2BU1W		11/15/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R2BU1W		11/15/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R2BU1W		11/15/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R2BU1W		11/15/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R2BU1W		11/15/2002	Sample	7440-09-7	T	Potassium	3.4		0.01	mg/l
R2BU1W		11/15/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R2BU1W		11/15/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R2BU1W		11/15/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R2BU1W		11/15/2002	Sample	7440-23-5	T	Sodium	18		80	mg/l
R2BU1W		11/15/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R2BU1W		11/15/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R2BU1W		11/15/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R2BU1W		11/15/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R2BU1W		11/15/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R2BU1W		11/15/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R2BU1W		11/15/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R2BU1W		11/15/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-38-2	D	Arsenic	0.1	U	0.1	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-39-3	D	Barium	0.049		0.01	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7439-89-6	D	Iron	0.037	J	0.05	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-09-7	D	Potassium	3.2		0.01	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-22-4	D	Silver	0.00084	J	0.01	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-23-5	D	Sodium	18		80	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-62-2	D	Vanadium	0.01	J	0.01	mg/l
R2BU1W-Filtered	R2BU1W	11/15/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R2AM1W		11/14/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R2AM1W		11/14/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R2AM1W		11/14/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R2AM1W		11/14/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R2AM1W		11/14/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R2AM1W		11/14/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R2AM1W		11/14/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R2AM1W		11/14/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM1W		11/14/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R2AM1W		11/14/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R2AM1W		11/14/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R2AM1W		11/14/2002	Sample	72-54-8	T	4,4'-DDD	0.1	UJ	0.1	ug/l
R2AM1W		11/14/2002	Sample	72-55-9	T	4,4'-DDE	0.1	UJ	0.1	ug/l
R2AM1W		11/14/2002	Sample	50-29-3	T	4,4'-DDT	0.1	UJ	0.1	ug/l
R2AM1W		11/14/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R2AM1W		11/14/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R2AM1W		11/14/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R2AM1W		11/14/2002	Sample	309-00-2	T	Aldrin	0.05	UJ	0.05	ug/l
R2AM1W		11/14/2002	Sample	319-84-6	T	alpha-BHC	0.05	UJ	0.05	ug/l
R2AM1W		11/14/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	UJ	0.05	ug/l
R2AM1W		11/14/2002	Sample	7429-90-5	T	Aluminum	0.93		0.02	mg/l
R2AM1W		11/14/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R2AM1W		11/14/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R2AM1W		11/14/2002	Sample	7440-39-3	T	Barium	0.06		0.01	mg/l
R2AM1W		11/14/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R2AM1W		11/14/2002	Sample	319-85-7	T	beta-BHC	0.05	UJ	0.05	ug/l
R2AM1W		11/14/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R2AM1W		11/14/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R2AM1W		11/14/2002	Sample	7440-70-2	T	Calcium	51		0.5	mg/l
R2AM1W		11/14/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R2AM1W		11/14/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R2AM1W		11/14/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R2AM1W		11/14/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R2AM1W		11/14/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R2AM1W		11/14/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	UJ	0.5	ug/l
R2AM1W		11/14/2002	Sample	319-86-8	T	delta-BHC	0.05	UJ	0.05	ug/l
R2AM1W		11/14/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R2AM1W		11/14/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	UJ	0.1	ug/l
R2AM1W		11/14/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R2AM1W		11/14/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R2AM1W		11/14/2002	Sample	60-57-1	T	Dieldrin	0.1	UJ	0.1	ug/l
R2AM1W		11/14/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM1W		11/14/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	959-98-8	T	Endosulfan I	0.05	UJ	0.05	ug/l
R2AM1W		11/14/2002	Sample	9	T	Endosulfan II	0.1	UJ	0.1	ug/l
R2AM1W		11/14/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	UJ	0.1	ug/l
R2AM1W		11/14/2002	Sample	72-20-8	T	Endrin	0.1	UJ	0.1	ug/l
R2AM1W		11/14/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	UJ	0.1	ug/l
R2AM1W		11/14/2002	Sample	5	T	Endrin Ketone	0.1	UJ	0.1	ug/l
R2AM1W		11/14/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	UJ	0.05	ug/l
R2AM1W		11/14/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	UJ	0.05	ug/l
R2AM1W		11/14/2002	Sample	E-11778	T	Hardness, Carbonate	240		200	Ca
R2AM1W		11/14/2002	Sample	76-44-8	T	Heptachlor	0.05	UJ	0.05	ug/l
R2AM1W		11/14/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	UJ	0.05	ug/l
R2AM1W		11/14/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	UJ	0.3	ug/l
R2AM1W		11/14/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	UJ	0.2	ug/l
R2AM1W		11/14/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	7439-89-6	T	Iron	1.2		0.05	mg/l
R2AM1W		11/14/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R2AM1W		11/14/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R2AM1W		11/14/2002	Sample	7439-96-5	T	Manganese	0.089		0.01	mg/l
R2AM1W		11/14/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R2AM1W		11/14/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R2AM1W		11/14/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R2AM1W		11/14/2002	Sample	72-43-5	T	Methoxychlor	0.5	UJ	0.5	ug/l
R2AM1W		11/14/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	UJ	0.1	ug/l
R2AM1W		11/14/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R2AM1W		11/14/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	UJ	0.5	ug/l
R2AM1W		11/14/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	UJ	0.3	ug/l
R2AM1W		11/14/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R2AM1W		11/14/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	UJ	0.2	ug/l
R2AM1W		11/14/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R2AM1W		11/14/2002	Sample	7440-09-7	T	Potassium	3.3		0.01	mg/l
R2AM1W		11/14/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R2AM1W		11/14/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R2AM1W		11/14/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R2AM1W		11/14/2002	Sample	7440-23-5	T	Sodium	19	J	80	mg/l
R2AM1W		11/14/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	UJ	0.2	ug/l
R2AM1W		11/14/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R2AM1W		11/14/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	8001-35-2	T	Toxaphene	5	UJ	5	ug/l
R2AM1W		11/14/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	UJ	0.1	ug/l
R2AM1W		11/14/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R2AM1W		11/14/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R2AM1W		11/14/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R2AM1W		11/14/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-39-3	D	Barium	0.051		0.01	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-70-2	D	Calcium	52		0.5	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-48-4	D	Cobalt	0.001	J	0.01	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7439-89-6	D	Iron	0.031	J	0.05	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7439-95-4	D	Magnesium	21		0.5	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-09-7	D	Potassium	3.3		0.01	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-23-5	D	Sodium	20	J	80	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R2AM1W-Filtered	R2AM1W	11/14/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	83-32-9	T	Acenaphthene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	67-64-1	T	Acetone	25	U	25	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7429-90-5	T	Aluminum	1		0.02	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	120-12-7	T	Anthracene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-39-3	T	Barium	0.062		0.01	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	71-43-2	T	Benzene	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	75-25-2	T	Bromoform	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	74-83-9	T	Bromomethane	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-70-2	T	Calcium	51		0.5	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	86-74-8	T	Carbazole	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	75-15-0	T	Carbon Disulfide	0.28	J	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	75-00-3	T	Chloroethane	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	67-66-3	T	Chloroform	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	74-87-3	T	Chloromethane	0.48	J	0.5	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	218-01-9	T	Chrysene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	75-99-0	T	Dalapon	120	U	120	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	2051-24-3	T	Decachlorobiphenyl	0.5	UJ	0.5	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	DICHLOR	T	Dichlorobiphenyl	0.1	UJ	0.1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	75-09-2	T	Dichloromethane	5	U	5	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	120-36-5	T	Dichlorprop	6	U	6	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	88-85-7	T	Dinoseb	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	9	T	Endosulfan II	0.1	U	0.1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	206-44-0	T	Fluoranthene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	86-73-7	T	Fluorene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	E-11778	T	Hardness, Carbonate	220		200	Ca
R2AM2W	R2AM1W	11/14/2002	Duplicate	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	HEPTACH	T	Heptachlorobiphenyl	0.3	UJ	0.3	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	HEXACHL	T	Hexachlorobiphenyl	0.2	UJ	0.2	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7439-89-6	T	Iron	1.3		0.05	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	78-59-1	T	Isophorone	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7439-95-4	T	Magnesium	21		0.5	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7439-96-5	T	Manganese	0.096		0.01	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	93-65-2	T	MCPP	120	U	120	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	MONOCH	T	Monochlorobiphenyl	0.1	UJ	0.1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	91-20-3	T	Naphthalene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM2W	R2AM1W	11/14/2002	Duplicate	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	NONACHL	T	Nonachlorobiphenyl	0.5	UJ	0.5	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	BIPHE	T	Octachlorobiphenyl	0.3	UJ	0.3	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	PENTBIP	T	Pentachlorobiphenyl	0.2	UJ	0.2	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	85-01-8	T	Phenanthrene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	108-95-2	T	Phenol	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-09-7	T	Potassium	3.4		0.01	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	129-00-0	T	Pyrene	10	U	10	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-23-5	T	Sodium	20	J	80	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	TETRACH	T	Tetrachlorobiphenyl	0.2	UJ	0.2	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	108-88-3	T	Toluene	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	8001-35-2	T	Toxaphene	5	U	5	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	TRICHLO	T	Trichlorobiphenyl	0.1	UJ	0.1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R2AM2W	R2AM1W	11/14/2002	Duplicate	7440-66-6	T	Zinc	0.0061	J	0.02	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-39-3	D	Barium	0.05		0.01	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-70-2	D	Calcium	50		0.5	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7439-89-6	D	Iron	0.05	U	0.05	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7439-95-4	D	Magnesium	20		0.5	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-09-7	D	Potassium	3.2		0.01	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-23-5	D	Sodium	19	J	80	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R2AM2W-Filtered	R2AM2W-Filtered	11/14/2002	Duplicate	7440-66-6	D	Zinc	0.02		0.02	mg/l
R2BM1W		11/14/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R2BM1W		11/14/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	1.2E-06	U	0.0000012	ug/l
R2BM1W		11/14/2002	Sample	4	T	1,2,3,4,6,7,8-HpCDF	1E-06	U	0.000001	ug/l
R2BM1W		11/14/2002	Sample	7	T	1,2,3,4,7,8,9-HpCDF	1.2E-06	U	0.0000012	ug/l
R2BM1W		11/14/2002	Sample	6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	7.7E-07	U	7.7E-07	ug/l
R2BM1W		11/14/2002	Sample	9	T	1,2,3,4,7,8-HxCDF	7.5E-07	U	7.5E-07	ug/l
R2BM1W		11/14/2002	Sample	7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	7.2E-07	U	7.2E-07	ug/l
R2BM1W		11/14/2002	Sample	9	T	1,2,3,6,7,8-HxCDF	6.8E-07	U	6.8E-07	ug/l
R2BM1W		11/14/2002	Sample	3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	6.7E-07	U	6.7E-07	ug/l
R2BM1W		11/14/2002	Sample	9	T	1,2,3,7,8,9-HxCDF	8.4E-07	U	8.4E-07	ug/l
R2BM1W		11/14/2002	Sample	6	T	1,2,3,7,8-Pentachlorodibenzofuran	8.6E-07	U	8.6E-07	ug/l
R2BM1W		11/14/2002	Sample	4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	1.5E-06	U	0.0000015	ug/l
R2BM1W		11/14/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R2BM1W		11/14/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BM1W		11/14/2002	Sample	5	T	2,3,4,6,7,8-HxCDF	7.7E-07	U	7.7E-07	ug/l
R2BM1W		11/14/2002	Sample	4	T	2,3,4,7,8-PeCDF	8.2E-07	U	8.2E-07	ug/l
R2BM1W		11/14/2002	Sample	1746-01-6	T	2,3,7,8-TCDD	8.7E-07	U	8.7E-07	ug/l
R2BM1W		11/14/2002	Sample	9	T	2,3,7,8-Tetrachlorodibenzofuran	2E-06	U	0.000002	ug/l
R2BM1W		11/14/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R2BM1W		11/14/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R2BM1W		11/14/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R2BM1W		11/14/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R2BM1W		11/14/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R2BM1W		11/14/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R2BM1W		11/14/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R2BM1W		11/14/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R2BM1W		11/14/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R2BM1W		11/14/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R2BM1W		11/14/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R2BM1W		11/14/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R2BM1W		11/14/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R2BM1W		11/14/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R2BM1W		11/14/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R2BM1W		11/14/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R2BM1W		11/14/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R2BM1W		11/14/2002	Sample	7429-90-5	T	Aluminum	0.71		0.02	mg/l
R2BM1W		11/14/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R2BM1W		11/14/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R2BM1W		11/14/2002	Sample	7440-39-3	T	Barium	0.058		0.01	mg/l
R2BM1W		11/14/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R2BM1W		11/14/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R2BM1W		11/14/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R2BM1W		11/14/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R2BM1W		11/14/2002	Sample	7440-70-2	T	Calcium	51		0.5	mg/l
R2BM1W		11/14/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	75-15-0	T	Carbon Disulfide	0.3	J	1	ug/l
R2BM1W		11/14/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R2BM1W		11/14/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R2BM1W		11/14/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R2BM1W		11/14/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BM1W		11/14/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R2BM1W		11/14/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R2BM1W		11/14/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	UJ	0.5	ug/l
R2BM1W		11/14/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R2BM1W		11/14/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R2BM1W		11/14/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	UJ	0.1	ug/l
R2BM1W		11/14/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R2BM1W		11/14/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R2BM1W		11/14/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R2BM1W		11/14/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R2BM1W		11/14/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R2BM1W		11/14/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R2BM1W		11/14/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R2BM1W		11/14/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R2BM1W		11/14/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R2BM1W		11/14/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R2BM1W		11/14/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R2BM1W		11/14/2002	Sample	E-11778	T	Hardness, Carbonate	200		200	Ca
R2BM1W		11/14/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R2BM1W		11/14/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R2BM1W		11/14/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	UJ	0.3	ug/l
R2BM1W		11/14/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	UJ	0.2	ug/l
R2BM1W		11/14/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	7439-89-6	T	Iron	0.97		0.05	mg/l
R2BM1W		11/14/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	7439-92-1	T	Lead	0.0036	J	0.005	mg/l
R2BM1W		11/14/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R2BM1W		11/14/2002	Sample	7439-96-5	T	Manganese	0.08		0.01	mg/l
R2BM1W		11/14/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R2BM1W		11/14/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R2BM1W		11/14/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R2BM1W		11/14/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R2BM1W		11/14/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	UJ	0.1	ug/l
R2BM1W		11/14/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R2BM1W		11/14/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	UJ	0.5	ug/l
R2BM1W		11/14/2002	Sample	3268-87-9	T	OCDD	4.4E-05	U	0.000044	ug/l
R2BM1W		11/14/2002	Sample	0	T	OCDF	1.8E-06	U	0.0000018	ug/l
R2BM1W		11/14/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	UJ	0.3	ug/l
R2BM1W		11/14/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R2BM1W		11/14/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	UJ	0.2	ug/l
R2BM1W		11/14/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R2BM1W		11/14/2002	Sample	7440-09-7	T	Potassium	3.3		0.01	mg/l
R2BM1W		11/14/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R2BM1W		11/14/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R2BM1W		11/14/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R2BM1W		11/14/2002	Sample	7440-23-5	T	Sodium	19	J	80	mg/l
R2BM1W		11/14/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	UJ	0.2	ug/l
R2BM1W		11/14/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R2BM1W		11/14/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	4	T	Total HpCDD	1.8E-06	U	0.0000018	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BM1W		11/14/2002	Sample	3	T	Total HpCDF	1.2E-06	U	0.0000012	ug/l
R2BM1W		11/14/2002	Sample	8	T	Total HxCDD	1.2E-06	U	0.0000012	ug/l
R2BM1W		11/14/2002	Sample	1	T	Total HxCDF	8.4E-07	U	8.4E-07	ug/l
R2BM1W		11/14/2002	Sample	9	T	Total PeCDD	2E-06	U	0.000002	ug/l
R2BM1W		11/14/2002	Sample	4	T	Total PeCDF	1.2E-06	U	0.0000012	ug/l
R2BM1W		11/14/2002	Sample	5	T	Total TCDD	9.4E-07	U	9.4E-07	ug/l
R2BM1W		11/14/2002	Sample	5	T	Total TCDF	2E-06	U	0.000002	ug/l
R2BM1W		11/14/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R2BM1W		11/14/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	UJ	0.1	ug/l
R2BM1W		11/14/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R2BM1W		11/14/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R2BM1W		11/14/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R2BM1W		11/14/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-39-3	D	Barium	0.049		0.01	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-48-4	D	Cobalt	0.00076	J	0.01	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7439-89-6	D	Iron	0.033	J	0.05	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-09-7	D	Potassium	3.1		0.01	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-23-5	D	Sodium	19	J	80	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R2BM1W-Filtered	R2BM1W	11/14/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R2CM1W		11/14/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R2CM1W		11/14/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R2CM1W		11/14/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R2CM1W		11/14/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R2CM1W		11/14/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R2CM1W		11/14/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R2CM1W		11/14/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R2CM1W		11/14/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R2CM1W		11/14/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R2CM1W		11/14/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R2CM1W		11/14/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R2CM1W		11/14/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2CM1W		11/14/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R2CM1W		11/14/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R2CM1W		11/14/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R2CM1W		11/14/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R2CM1W		11/14/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R2CM1W		11/14/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R2CM1W		11/14/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R2CM1W		11/14/2002	Sample	7429-90-5	T	Aluminum	0.8		0.02	mg/l
R2CM1W		11/14/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R2CM1W		11/14/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R2CM1W		11/14/2002	Sample	7440-39-3	T	Barium	0.06		0.01	mg/l
R2CM1W		11/14/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R2CM1W		11/14/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R2CM1W		11/14/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R2CM1W		11/14/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R2CM1W		11/14/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R2CM1W		11/14/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	75-15-0	T	Carbon Disulfide	0.69	J	1	ug/l
R2CM1W		11/14/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R2CM1W		11/14/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R2CM1W		11/14/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R2CM1W		11/14/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R2CM1W		11/14/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R2CM1W		11/14/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R2CM1W		11/14/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	UJ	0.5	ug/l
R2CM1W		11/14/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R2CM1W		11/14/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R2CM1W		11/14/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	UJ	0.1	ug/l
R2CM1W		11/14/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R2CM1W		11/14/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R2CM1W		11/14/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R2CM1W		11/14/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R2CM1W		11/14/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R2CM1W		11/14/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R2CM1W		11/14/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R2CM1W		11/14/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R2CM1W		11/14/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R2CM1W		11/14/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R2CM1W		11/14/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2CM1W		11/14/2002	Sample	E-11778	T	Hardness, Carbonate	220		200	Ca
R2CM1W		11/14/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R2CM1W		11/14/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R2CM1W		11/14/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	UJ	0.3	ug/l
R2CM1W		11/14/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	UJ	0.2	ug/l
R2CM1W		11/14/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	7439-89-6	T	Iron	1		0.05	mg/l
R2CM1W		11/14/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R2CM1W		11/14/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R2CM1W		11/14/2002	Sample	7439-96-5	T	Manganese	0.082		0.01	mg/l
R2CM1W		11/14/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R2CM1W		11/14/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R2CM1W		11/14/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R2CM1W		11/14/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R2CM1W		11/14/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	UJ	0.1	ug/l
R2CM1W		11/14/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R2CM1W		11/14/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	UJ	0.5	ug/l
R2CM1W		11/14/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	UJ	0.3	ug/l
R2CM1W		11/14/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R2CM1W		11/14/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	UJ	0.2	ug/l
R2CM1W		11/14/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R2CM1W		11/14/2002	Sample	7440-09-7	T	Potassium	3.4		0.01	mg/l
R2CM1W		11/14/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R2CM1W		11/14/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R2CM1W		11/14/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R2CM1W		11/14/2002	Sample	7440-23-5	T	Sodium	20	J	80	mg/l
R2CM1W		11/14/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	UJ	0.2	ug/l
R2CM1W		11/14/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R2CM1W		11/14/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R2CM1W		11/14/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	UJ	0.1	ug/l
R2CM1W		11/14/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R2CM1W		11/14/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R2CM1W		11/14/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R2CM1W		11/14/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-39-3	D	Barium	0.051		0.01	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-70-2	D	Calcium	51		0.5	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7439-89-6	D	Iron	0.023	J	0.05	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-09-7	D	Potassium	3.2		0.01	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-23-5	D	Sodium	20	J	80	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2CM1W-Filtered	R2CM1W	11/14/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R2AD1W		11/13/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R2AD1W		11/13/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R2AD1W		11/13/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R2AD1W		11/13/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R2AD1W		11/13/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R2AD1W		11/13/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R2AD1W		11/13/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R2AD1W		11/13/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R2AD1W		11/13/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R2AD1W		11/13/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R2AD1W		11/13/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R2AD1W		11/13/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R2AD1W		11/13/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R2AD1W		11/13/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R2AD1W		11/13/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R2AD1W		11/13/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R2AD1W		11/13/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R2AD1W		11/13/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R2AD1W		11/13/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R2AD1W		11/13/2002	Sample	7429-90-5	T	Aluminum	0.77		0.02	mg/l
R2AD1W		11/13/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R2AD1W		11/13/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R2AD1W		11/13/2002	Sample	7440-39-3	T	Barium	0.058		0.01	mg/l
R2AD1W		11/13/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R2AD1W		11/13/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R2AD1W		11/13/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R2AD1W		11/13/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R2AD1W		11/13/2002	Sample	7440-70-2	T	Calcium	50		0.5	mg/l
R2AD1W		11/13/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AD1W		11/13/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R2AD1W		11/13/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R2AD1W		11/13/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R2AD1W		11/13/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R2AD1W		11/13/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R2AD1W		11/13/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R2AD1W		11/13/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	UJ	0.5	ug/l
R2AD1W		11/13/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R2AD1W		11/13/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R2AD1W		11/13/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	UJ	0.1	ug/l
R2AD1W		11/13/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R2AD1W		11/13/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R2AD1W		11/13/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R2AD1W		11/13/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R2AD1W		11/13/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R2AD1W		11/13/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R2AD1W		11/13/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R2AD1W		11/13/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R2AD1W		11/13/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R2AD1W		11/13/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R2AD1W		11/13/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R2AD1W		11/13/2002	Sample	E-11778	T	Hardness, Carbonate	200		200	Ca
R2AD1W		11/13/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R2AD1W		11/13/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R2AD1W		11/13/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	UJ	0.3	ug/l
R2AD1W		11/13/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	UJ	0.2	ug/l
R2AD1W		11/13/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	7439-89-6	T	Iron	1		0.05	mg/l
R2AD1W		11/13/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R2AD1W		11/13/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R2AD1W		11/13/2002	Sample	7439-96-5	T	Manganese	0.083		0.01	mg/l
R2AD1W		11/13/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R2AD1W		11/13/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R2AD1W		11/13/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R2AD1W		11/13/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R2AD1W		11/13/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	UJ	0.1	ug/l
R2AD1W		11/13/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R2AD1W		11/13/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	UJ	0.5	ug/l
R2AD1W		11/13/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	UJ	0.3	ug/l
R2AD1W		11/13/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R2AD1W		11/13/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	UJ	0.2	ug/l
R2AD1W		11/13/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R2AD1W		11/13/2002	Sample	7440-09-7	T	Potassium	3.3		0.01	mg/l
R2AD1W		11/13/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R2AD1W		11/13/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AD1W		11/13/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R2AD1W		11/13/2002	Sample	7440-23-5	T	Sodium	19	J	80	mg/l
R2AD1W		11/13/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	UJ	0.2	ug/l
R2AD1W		11/13/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R2AD1W		11/13/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R2AD1W		11/13/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	UJ	0.1	ug/l
R2AD1W		11/13/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R2AD1W		11/13/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R2AD1W		11/13/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R2AD1W		11/13/2002	Sample	7440-66-6	T	Zinc	0.0054	J	0.02	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-39-3	D	Barium	0.05		0.01	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7439-89-6	D	Iron	0.05	U	0.05	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-09-7	D	Potassium	3.2		0.01	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-23-5	D	Sodium	19	J	80	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R2AD1W-Filtered	R2AD1W	11/13/2002	Sample	7440-66-6	D	Zinc	0.036		0.02	mg/l
R2BD1W		11/13/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R2BD1W		11/13/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R2BD1W		11/13/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R2BD1W		11/13/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R2BD1W		11/13/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R2BD1W		11/13/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R2BD1W		11/13/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R2BD1W		11/13/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R2BD1W		11/13/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R2BD1W		11/13/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R2BD1W		11/13/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R2BD1W		11/13/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BD1W		11/13/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R2BD1W		11/13/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R2BD1W		11/13/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R2BD1W		11/13/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R2BD1W		11/13/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R2BD1W		11/13/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R2BD1W		11/13/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R2BD1W		11/13/2002	Sample	7429-90-5	T	Aluminum	0.75		0.02	mg/l
R2BD1W		11/13/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R2BD1W		11/13/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R2BD1W		11/13/2002	Sample	7440-39-3	T	Barium	0.058		0.01	mg/l
R2BD1W		11/13/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R2BD1W		11/13/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R2BD1W		11/13/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R2BD1W		11/13/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R2BD1W		11/13/2002	Sample	7440-70-2	T	Calcium	50		0.5	mg/l
R2BD1W		11/13/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R2BD1W		11/13/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R2BD1W		11/13/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R2BD1W		11/13/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R2BD1W		11/13/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R2BD1W		11/13/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R2BD1W		11/13/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	UJ	0.5	ug/l
R2BD1W		11/13/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R2BD1W		11/13/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R2BD1W		11/13/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	UJ	0.1	ug/l
R2BD1W		11/13/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R2BD1W		11/13/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R2BD1W		11/13/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R2BD1W		11/13/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R2BD1W		11/13/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R2BD1W		11/13/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R2BD1W		11/13/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R2BD1W		11/13/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R2BD1W		11/13/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R2BD1W		11/13/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R2BD1W		11/13/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BD1W		11/13/2002	Sample	E-11778	T	Hardness, Carbonate	250		200	Ca
R2BD1W		11/13/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R2BD1W		11/13/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R2BD1W		11/13/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	UJ	0.3	ug/l
R2BD1W		11/13/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	UJ	0.2	ug/l
R2BD1W		11/13/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	7439-89-6	T	Iron	0.99		0.05	mg/l
R2BD1W		11/13/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R2BD1W		11/13/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R2BD1W		11/13/2002	Sample	7439-96-5	T	Manganese	0.082		0.01	mg/l
R2BD1W		11/13/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R2BD1W		11/13/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R2BD1W		11/13/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R2BD1W		11/13/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R2BD1W		11/13/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	UJ	0.1	ug/l
R2BD1W		11/13/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R2BD1W		11/13/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	UJ	0.5	ug/l
R2BD1W		11/13/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	UJ	0.3	ug/l
R2BD1W		11/13/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R2BD1W		11/13/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	UJ	0.2	ug/l
R2BD1W		11/13/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R2BD1W		11/13/2002	Sample	7440-09-7	T	Potassium	3.3		0.01	mg/l
R2BD1W		11/13/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R2BD1W		11/13/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R2BD1W		11/13/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R2BD1W		11/13/2002	Sample	7440-23-5	T	Sodium	19	J	80	mg/l
R2BD1W		11/13/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	UJ	0.2	ug/l
R2BD1W		11/13/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R2BD1W		11/13/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R2BD1W		11/13/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	UJ	0.1	ug/l
R2BD1W		11/13/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R2BD1W		11/13/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R2BD1W		11/13/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R2BD1W		11/13/2002	Sample	7440-66-6	T	Zinc	0.0044	J	0.02	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-39-3	D	Barium	0.049		0.01	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-70-2	D	Calcium	49		0.5	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7439-89-6	D	Iron	0.05	U	0.05	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-09-7	D	Potassium	3.1		0.01	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-23-5	D	Sodium	18	J	80	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BD1W-Filtered	R2BD1W	11/13/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R3AU1W		11/13/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R3AU1W		11/13/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	40		10	ug/l
R3AU1W		11/13/2002	Sample	107-06-2	T	1,2-Dichloroethane	0.7	J	1	ug/l
R3AU1W		11/13/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	0.24	J	2	ug/l
R3AU1W		11/13/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	3.9	J	10	ug/l
R3AU1W		11/13/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	93-76-5	T	2,4,5-T	0.3	J	0.5	ug/l
R3AU1W		11/13/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R3AU1W		11/13/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	17		10	ug/l
R3AU1W		11/13/2002	Sample	94-75-7	T	2,4-D	29	J	0.5	ug/l
R3AU1W		11/13/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R3AU1W		11/13/2002	Sample	120-83-2	T	2,4-Dichlorophenol	69		10	ug/l
R3AU1W		11/13/2002	Sample	105-67-9	T	2,4-Dimethylphenol	8.3	J	10	ug/l
R3AU1W		11/13/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R3AU1W		11/13/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	95-57-8	T	2-Chlorophenol	31		10	ug/l
R3AU1W		11/13/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R3AU1W		11/13/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R3AU1W		11/13/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	27		10	ug/l
R3AU1W		11/13/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R3AU1W		11/13/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R3AU1W		11/13/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R3AU1W		11/13/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R3AU1W		11/13/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R3AU1W		11/13/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	3.8	J	8.8	ug/l
R3AU1W		11/13/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R3AU1W		11/13/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R3AU1W		11/13/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R3AU1W		11/13/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R3AU1W		11/13/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R3AU1W		11/13/2002	Sample	7429-90-5	T	Aluminum	0.77		0.02	mg/l
R3AU1W		11/13/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R3AU1W		11/13/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R3AU1W		11/13/2002	Sample	7440-39-3	T	Barium	0.065		0.01	mg/l
R3AU1W		11/13/2002	Sample	71-43-2	T	Benzene	4.5		1	ug/l
R3AU1W		11/13/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R3AU1W		11/13/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R3AU1W		11/13/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R3AU1W		11/13/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R3AU1W		11/13/2002	Sample	7440-70-2	T	Calcium	53		0.5	mg/l
R3AU1W		11/13/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AU1W		11/13/2002	Sample	56-23-5	T	Carbon Tetrachloride	0.17	J	1	ug/l
R3AU1W		11/13/2002	Sample	108-90-7	T	Chlorobenzene	56		1	ug/l
R3AU1W		11/13/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	74-87-3	T	Chloromethane	0.2	J	0.5	ug/l
R3AU1W		11/13/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R3AU1W		11/13/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R3AU1W		11/13/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R3AU1W		11/13/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R3AU1W		11/13/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	UJ	0.5	ug/l
R3AU1W		11/13/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R3AU1W		11/13/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R3AU1W		11/13/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	UJ	0.1	ug/l
R3AU1W		11/13/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R3AU1W		11/13/2002	Sample	120-36-5	T	Dichlorprop	2.2	J	6	ug/l
R3AU1W		11/13/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R3AU1W		11/13/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R3AU1W		11/13/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R3AU1W		11/13/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R3AU1W		11/13/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R3AU1W		11/13/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R3AU1W		11/13/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R3AU1W		11/13/2002	Sample	100-41-4	T	Ethylbenzene	1.3		0.83	ug/l
R3AU1W		11/13/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R3AU1W		11/13/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R3AU1W		11/13/2002	Sample	E-11778	T	Hardness, Carbonate	220		200	Ca
R3AU1W		11/13/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R3AU1W		11/13/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R3AU1W		11/13/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	UJ	0.3	ug/l
R3AU1W		11/13/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	UJ	0.2	ug/l
R3AU1W		11/13/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	7439-89-6	T	Iron	1.3		0.05	mg/l
R3AU1W		11/13/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R3AU1W		11/13/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R3AU1W		11/13/2002	Sample	7439-96-5	T	Manganese	0.14		0.01	mg/l
R3AU1W		11/13/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R3AU1W		11/13/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R3AU1W		11/13/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R3AU1W		11/13/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R3AU1W		11/13/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	UJ	0.1	ug/l
R3AU1W		11/13/2002	Sample	91-20-3	T	Naphthalene	21		10	ug/l
R3AU1W		11/13/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R3AU1W		11/13/2002	Sample	98-95-3	T	Nitrobenzene	2.5	J	10	ug/l
R3AU1W		11/13/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	UJ	0.5	ug/l
R3AU1W		11/13/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	UJ	0.3	ug/l
R3AU1W		11/13/2002	Sample	106-47-8	T	P-Chloroaniline	160		20	ug/l
R3AU1W		11/13/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	UJ	0.2	ug/l
R3AU1W		11/13/2002	Sample	87-86-5	T	Pentachlorophenol	1.9	J	1	ug/l
R3AU1W		11/13/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R3AU1W		11/13/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R3AU1W		11/13/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R3AU1W		11/13/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AU1W		11/13/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R3AU1W		11/13/2002	Sample	7440-23-5	T	Sodium	24	J	80	mg/l
R3AU1W		11/13/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	UJ	0.2	ug/l
R3AU1W		11/13/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R3AU1W		11/13/2002	Sample	108-88-3	T	Toluene	4.5		1	ug/l
R3AU1W		11/13/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R3AU1W		11/13/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	UJ	0.1	ug/l
R3AU1W		11/13/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R3AU1W		11/13/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R3AU1W		11/13/2002	Sample	1330-20-7	T	Xylenes, Total	3	J	2	ug/l
R3AU1W		11/13/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-39-3	D	Barium	0.054		0.01	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-70-2	D	Calcium	53		0.5	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7439-89-6	D	Iron	0.031	J	0.05	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7439-95-4	D	Magnesium	21		0.5	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-09-7	D	Potassium	3.4		0.01	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-23-5	D	Sodium	24	J	80	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R3AU1W-Filtered	R3AU1W	11/13/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R3BU1W		11/13/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R3BU1W		11/13/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	1.2	J	10	ug/l
R3BU1W		11/13/2002	Sample	107-06-2	T	1,2-Dichloroethane	0.42	J	1	ug/l
R3BU1W		11/13/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R3BU1W		11/13/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R3BU1W		11/13/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R3BU1W		11/13/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	94-75-7	T	2,4-D	5.4	J	0.5	ug/l
R3BU1W		11/13/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R3BU1W		11/13/2002	Sample	120-83-2	T	2,4-Dichlorophenol	4.1	J	10	ug/l
R3BU1W		11/13/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R3BU1W		11/13/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R3BU1W		11/13/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R3BU1W		11/13/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R3BU1W		11/13/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R3BU1W		11/13/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BU1W		11/13/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R3BU1W		11/13/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R3BU1W		11/13/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R3BU1W		11/13/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R3BU1W		11/13/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R3BU1W		11/13/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R3BU1W		11/13/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R3BU1W		11/13/2002	Sample	7429-90-5	T	Aluminum	0.77		0.02	mg/l
R3BU1W		11/13/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R3BU1W		11/13/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R3BU1W		11/13/2002	Sample	7440-39-3	T	Barium	0.058		0.01	mg/l
R3BU1W		11/13/2002	Sample	71-43-2	T	Benzene	0.61	J	1	ug/l
R3BU1W		11/13/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R3BU1W		11/13/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R3BU1W		11/13/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R3BU1W		11/13/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R3BU1W		11/13/2002	Sample	7440-70-2	T	Calcium	50		0.5	mg/l
R3BU1W		11/13/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R3BU1W		11/13/2002	Sample	108-90-7	T	Chlorobenzene	9		1	ug/l
R3BU1W		11/13/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R3BU1W		11/13/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R3BU1W		11/13/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R3BU1W		11/13/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R3BU1W		11/13/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R3BU1W		11/13/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	UJ	0.5	ug/l
R3BU1W		11/13/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R3BU1W		11/13/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R3BU1W		11/13/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	UJ	0.1	ug/l
R3BU1W		11/13/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R3BU1W		11/13/2002	Sample	120-36-5	T	Dichlorprop	0.77	J	6	ug/l
R3BU1W		11/13/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R3BU1W		11/13/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R3BU1W		11/13/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R3BU1W		11/13/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R3BU1W		11/13/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R3BU1W		11/13/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R3BU1W		11/13/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R3BU1W		11/13/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R3BU1W		11/13/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BU1W		11/13/2002	Sample	E-11778	T	Hardness, Carbonate	190		200	Ca
R3BU1W		11/13/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R3BU1W		11/13/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R3BU1W		11/13/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	UJ	0.3	ug/l
R3BU1W		11/13/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	UJ	0.2	ug/l
R3BU1W		11/13/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l
R3BU1W		11/13/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R3BU1W		11/13/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R3BU1W		11/13/2002	Sample	7439-96-5	T	Manganese	0.088		0.01	mg/l
R3BU1W		11/13/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R3BU1W		11/13/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R3BU1W		11/13/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R3BU1W		11/13/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R3BU1W		11/13/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	UJ	0.1	ug/l
R3BU1W		11/13/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R3BU1W		11/13/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	UJ	0.5	ug/l
R3BU1W		11/13/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	UJ	0.3	ug/l
R3BU1W		11/13/2002	Sample	106-47-8	T	P-Chloroaniline	10	J	20	ug/l
R3BU1W		11/13/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	UJ	0.2	ug/l
R3BU1W		11/13/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R3BU1W		11/13/2002	Sample	7440-09-7	T	Potassium	3.3		0.01	mg/l
R3BU1W		11/13/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R3BU1W		11/13/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R3BU1W		11/13/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R3BU1W		11/13/2002	Sample	7440-23-5	T	Sodium	21	J	80	mg/l
R3BU1W		11/13/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	UJ	0.2	ug/l
R3BU1W		11/13/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R3BU1W		11/13/2002	Sample	108-88-3	T	Toluene	0.87	J	1	ug/l
R3BU1W		11/13/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R3BU1W		11/13/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	UJ	0.1	ug/l
R3BU1W		11/13/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R3BU1W		11/13/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R3BU1W		11/13/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R3BU1W		11/13/2002	Sample	7440-66-6	T	Zinc	0.037		0.02	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-39-3	D	Barium	0.051		0.01	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-70-2	D	Calcium	51		0.5	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7439-89-6	D	Iron	0.05	U	0.05	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-09-7	D	Potassium	3.3		0.01	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-23-5	D	Sodium	22	J	80	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BU1W-Filtered	R3BU1W	11/13/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R3AM1W		11/12/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R3AM1W		11/12/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R3AM1W		11/12/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R3AM1W		11/12/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R3AM1W		11/12/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	94-75-7	T	2,4-D	4.1		0.5	ug/l
R3AM1W		11/12/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R3AM1W		11/12/2002	Sample	120-83-2	T	2,4-Dichlorophenol	3	J	10	ug/l
R3AM1W		11/12/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R3AM1W		11/12/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	95-57-8	T	2-Chlorophenol	2.3	J	10	ug/l
R3AM1W		11/12/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R3AM1W		11/12/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R3AM1W		11/12/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R3AM1W		11/12/2002	Sample	72-54-8	T	4,4'-DDD	0.1	UJ	0.1	ug/l
R3AM1W		11/12/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R3AM1W		11/12/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R3AM1W		11/12/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R3AM1W		11/12/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R3AM1W		11/12/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R3AM1W		11/12/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R3AM1W		11/12/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R3AM1W		11/12/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R3AM1W		11/12/2002	Sample	7429-90-5	T	Aluminum	0.94	J	0.02	mg/l
R3AM1W		11/12/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R3AM1W		11/12/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R3AM1W		11/12/2002	Sample	7440-39-3	T	Barium	0.062		0.01	mg/l
R3AM1W		11/12/2002	Sample	71-43-2	T	Benzene	0.55	J	1	ug/l
R3AM1W		11/12/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R3AM1W		11/12/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R3AM1W		11/12/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R3AM1W		11/12/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R3AM1W		11/12/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R3AM1W		11/12/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AM1W		11/12/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R3AM1W		11/12/2002	Sample	108-90-7	T	Chlorobenzene	6.1		1	ug/l
R3AM1W		11/12/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R3AM1W		11/12/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R3AM1W		11/12/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R3AM1W		11/12/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R3AM1W		11/12/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R3AM1W		11/12/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R3AM1W		11/12/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R3AM1W		11/12/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R3AM1W		11/12/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R3AM1W		11/12/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R3AM1W		11/12/2002	Sample	120-36-5	T	Dichlorprop	1	J	6	ug/l
R3AM1W		11/12/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R3AM1W		11/12/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	88-85-7	T	Dinoseb	10	UJ	10	ug/l
R3AM1W		11/12/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R3AM1W		11/12/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R3AM1W		11/12/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R3AM1W		11/12/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R3AM1W		11/12/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	UJ	0.1	ug/l
R3AM1W		11/12/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R3AM1W		11/12/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R3AM1W		11/12/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R3AM1W		11/12/2002	Sample	E-11778	T	Hardness, Carbonate	320		200	Ca
R3AM1W		11/12/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R3AM1W		11/12/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R3AM1W		11/12/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R3AM1W		11/12/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R3AM1W		11/12/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	7439-89-6	T	Iron	1.3		0.05	mg/l
R3AM1W		11/12/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R3AM1W		11/12/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R3AM1W		11/12/2002	Sample	7439-96-5	T	Manganese	0.096		0.01	mg/l
R3AM1W		11/12/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R3AM1W		11/12/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R3AM1W		11/12/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R3AM1W		11/12/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R3AM1W		11/12/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R3AM1W		11/12/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R3AM1W		11/12/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R3AM1W		11/12/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R3AM1W		11/12/2002	Sample	106-47-8	T	P-Chloroaniline	14	J	20	ug/l
R3AM1W		11/12/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R3AM1W		11/12/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	108-95-2	T	Phenol	12		10	ug/l
R3AM1W		11/12/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R3AM1W		11/12/2002	Sample	7440-09-7	T	Potassium	3.6		0.01	mg/l
R3AM1W		11/12/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R3AM1W		11/12/2002	Sample	7782-49-2	T	Selenium	0.01	UJ	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AM1W		11/12/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R3AM1W		11/12/2002	Sample	7440-23-5	T	Sodium	22		80	mg/l
R3AM1W		11/12/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R3AM1W		11/12/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R3AM1W		11/12/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R3AM1W		11/12/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R3AM1W		11/12/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R3AM1W		11/12/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R3AM1W		11/12/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R3AM1W		11/12/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-39-3	D	Barium	0.052		0.01	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-70-2	D	Calcium	53		0.5	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7439-89-6	D	Iron	0.024	J	0.05	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7439-95-4	D	Magnesium	21		0.5	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-09-7	D	Potassium	3.6		0.01	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-23-5	D	Sodium	23	J	80	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R3AM1W-Filtered	R3AM1W	11/12/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R3BM1W		11/12/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R3BM1W		11/12/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	2E-06	U	0.000002	ug/l
R3BM1W		11/12/2002	Sample	4	T	1,2,3,4,6,7,8-HpCDF	1.3E-06	U	0.0000013	ug/l
R3BM1W		11/12/2002	Sample	7	T	1,2,3,4,7,8,9-HpCDF	6.2E-07	U	6.2E-07	ug/l
R3BM1W		11/12/2002	Sample	6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	6.8E-07	UJ	6.8E-07	ug/l
R3BM1W		11/12/2002	Sample	9	T	1,2,3,4,7,8-HxCDF	9.5E-07	U	9.5E-07	ug/l
R3BM1W		11/12/2002	Sample	7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	7E-07	U	0.0000007	ug/l
R3BM1W		11/12/2002	Sample	9	T	1,2,3,6,7,8-HxCDF	6E-07	U	0.0000006	ug/l
R3BM1W		11/12/2002	Sample	3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	8.8E-07	U	8.8E-07	ug/l
R3BM1W		11/12/2002	Sample	9	T	1,2,3,7,8,9-HxCDF	7.4E-07	U	7.4E-07	ug/l
R3BM1W		11/12/2002	Sample	6	T	1,2,3,7,8-Pentachlorodibenzofuran	8E-07	U	0.0000008	ug/l
R3BM1W		11/12/2002	Sample	4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	1.6E-06	U	0.0000016	ug/l
R3BM1W		11/12/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	107-06-2	T	1,2-Dichloroethane	0.4	J	1	ug/l
R3BM1W		11/12/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	0.22	J	2	ug/l
R3BM1W		11/12/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	5	T	2,3,4,6,7,8-HxCDF	6.8E-07	U	6.8E-07	ug/l
R3BM1W		11/12/2002	Sample	4	T	2,3,4,7,8-PeCDF	7.6E-07	U	7.6E-07	ug/l
R3BM1W		11/12/2002	Sample	1746-01-6	T	2,3,7,8-TCDD	8.7E-07	U	8.7E-07	ug/l
R3BM1W		11/12/2002	Sample	9	T	2,3,7,8-Tetrachlorodibenzofuran	1.2E-06	U	0.0000012	ug/l
R3BM1W		11/12/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R3BM1W		11/12/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R3BM1W		11/12/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	94-75-7	T	2,4-D	3.8		0.5	ug/l
R3BM1W		11/12/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R3BM1W		11/12/2002	Sample	120-83-2	T	2,4-Dichlorophenol	3.2	J	10	ug/l
R3BM1W		11/12/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BM1W		11/12/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R3BM1W		11/12/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	95-57-8	T	2-Chlorophenol	2.6	J	10	ug/l
R3BM1W		11/12/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R3BM1W		11/12/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R3BM1W		11/12/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	1.3	J	10	ug/l
R3BM1W		11/12/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R3BM1W		11/12/2002	Sample	72-54-8	T	4,4'-DDD	0.1	UJ	0.1	ug/l
R3BM1W		11/12/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R3BM1W		11/12/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R3BM1W		11/12/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R3BM1W		11/12/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R3BM1W		11/12/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R3BM1W		11/12/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R3BM1W		11/12/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R3BM1W		11/12/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R3BM1W		11/12/2002	Sample	7429-90-5	T	Aluminum	0.78	J	0.02	mg/l
R3BM1W		11/12/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R3BM1W		11/12/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R3BM1W		11/12/2002	Sample	7440-39-3	T	Barium	0.062		0.01	mg/l
R3BM1W		11/12/2002	Sample	71-43-2	T	Benzene	0.44	J	1	ug/l
R3BM1W		11/12/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R3BM1W		11/12/2002	Sample	319-85-7	T	beta-BHC	0.008	J	0.05	ug/l
R3BM1W		11/12/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R3BM1W		11/12/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	74-83-9	T	Bromomethane	1	UJ	1	ug/l
R3BM1W		11/12/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R3BM1W		11/12/2002	Sample	7440-70-2	T	Calcium	53		0.5	mg/l
R3BM1W		11/12/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R3BM1W		11/12/2002	Sample	108-90-7	T	Chlorobenzene	5.4		1	ug/l
R3BM1W		11/12/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R3BM1W		11/12/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R3BM1W		11/12/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R3BM1W		11/12/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R3BM1W		11/12/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R3BM1W		11/12/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R3BM1W		11/12/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R3BM1W		11/12/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R3BM1W		11/12/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R3BM1W		11/12/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R3BM1W		11/12/2002	Sample	120-36-5	T	Dichlorprop	0.89	J	6	ug/l
R3BM1W		11/12/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R3BM1W		11/12/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BM1W		11/12/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	88-85-7	T	Dinoseb	10	UJ	10	ug/l
R3BM1W		11/12/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R3BM1W		11/12/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R3BM1W		11/12/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R3BM1W		11/12/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R3BM1W		11/12/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	UJ	0.1	ug/l
R3BM1W		11/12/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R3BM1W		11/12/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R3BM1W		11/12/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R3BM1W		11/12/2002	Sample	E-11778	T	Hardness, Carbonate	330		200	Ca
R3BM1W		11/12/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R3BM1W		11/12/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R3BM1W		11/12/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R3BM1W		11/12/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R3BM1W		11/12/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l
R3BM1W		11/12/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R3BM1W		11/12/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R3BM1W		11/12/2002	Sample	7439-96-5	T	Manganese	0.093		0.01	mg/l
R3BM1W		11/12/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R3BM1W		11/12/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R3BM1W		11/12/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R3BM1W		11/12/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R3BM1W		11/12/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R3BM1W		11/12/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R3BM1W		11/12/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R3BM1W		11/12/2002	Sample	3268-87-9	T	OCDD	3.9E-05	U	0.000039	ug/l
R3BM1W		11/12/2002	Sample	0	T	OCDF	3.3E-06	U	0.0000033	ug/l
R3BM1W		11/12/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R3BM1W		11/12/2002	Sample	106-47-8	T	P-Chloroaniline	16	J	20	ug/l
R3BM1W		11/12/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R3BM1W		11/12/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	108-95-2	T	Phenol	14		10	ug/l
R3BM1W		11/12/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R3BM1W		11/12/2002	Sample	7440-09-7	T	Potassium	3.6		0.01	mg/l
R3BM1W		11/12/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R3BM1W		11/12/2002	Sample	7782-49-2	T	Selenium	0.01	UJ	0.01	mg/l
R3BM1W		11/12/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R3BM1W		11/12/2002	Sample	7440-23-5	T	Sodium	22		80	mg/l
R3BM1W		11/12/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R3BM1W		11/12/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R3BM1W		11/12/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	4	T	Total HpCDD	2.9E-06	U	0.0000029	ug/l
R3BM1W		11/12/2002	Sample	3	T	Total HpCDF	1.3E-06	U	0.0000013	ug/l
R3BM1W		11/12/2002	Sample	8	T	Total HxCDD	1.8E-06	U	0.0000018	ug/l
R3BM1W		11/12/2002	Sample	1	T	Total HxCDF	9.5E-07	U	9.5E-07	ug/l
R3BM1W		11/12/2002	Sample	9	T	Total PeCDD	2.5E-06	U	0.0000025	ug/l
R3BM1W		11/12/2002	Sample	4	T	Total PeCDF	1E-06	U	0.000001	ug/l
R3BM1W		11/12/2002	Sample	5	T	Total TCDD	8.7E-07	U	8.7E-07	ug/l
R3BM1W		11/12/2002	Sample	5	T	Total TCDF	1.2E-06	U	0.0000012	ug/l
R3BM1W		11/12/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R3BM1W		11/12/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R3BM1W		11/12/2002	Sample	79-01-6	T	Trichloroethylene	0.58	J	1	ug/l
R3BM1W		11/12/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BM1W		11/12/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R3BM1W		11/12/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R3BM1W		11/12/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-39-3	D	Barium	0.052		0.01	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-70-2	D	Calcium	53		0.5	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7439-89-6	D	Iron	0.032	J	0.05	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7439-95-4	D	Magnesium	21		0.5	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-09-7	D	Potassium	3.6		0.01	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-23-5	D	Sodium	23	J	80	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R3BM1W-Filtered	R3BM1W	11/12/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R3CM1W		11/13/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R3CM1W		11/13/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R3CM1W		11/13/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R3CM1W		11/13/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R3CM1W		11/13/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R3CM1W		11/13/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R3CM1W		11/13/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R3CM1W		11/13/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R3CM1W		11/13/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R3CM1W		11/13/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R3CM1W		11/13/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R3CM1W		11/13/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R3CM1W		11/13/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R3CM1W		11/13/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R3CM1W		11/13/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R3CM1W		11/13/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R3CM1W		11/13/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R3CM1W		11/13/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l

Appendix II-C1
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Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3CM1W		11/13/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R3CM1W		11/13/2002	Sample	7429-90-5	T	Aluminum	0.84		0.02	mg/l
R3CM1W		11/13/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R3CM1W		11/13/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R3CM1W		11/13/2002	Sample	7440-39-3	T	Barium	0.06		0.01	mg/l
R3CM1W		11/13/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R3CM1W		11/13/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R3CM1W		11/13/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R3CM1W		11/13/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R3CM1W		11/13/2002	Sample	7440-70-2	T	Calcium	51		0.5	mg/l
R3CM1W		11/13/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R3CM1W		11/13/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R3CM1W		11/13/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R3CM1W		11/13/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	7440-48-4	T	Cobalt	0.02	U	0.02	mg/l
R3CM1W		11/13/2002	Sample	7440-50-8	T	Copper	0.039	J	0.01	mg/l
R3CM1W		11/13/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R3CM1W		11/13/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	UJ	0.5	ug/l
R3CM1W		11/13/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R3CM1W		11/13/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R3CM1W		11/13/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	UJ	0.1	ug/l
R3CM1W		11/13/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R3CM1W		11/13/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R3CM1W		11/13/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R3CM1W		11/13/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R3CM1W		11/13/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R3CM1W		11/13/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R3CM1W		11/13/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R3CM1W		11/13/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R3CM1W		11/13/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R3CM1W		11/13/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R3CM1W		11/13/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R3CM1W		11/13/2002	Sample	E-11778	T	Hardness, Carbonate	200		200	Ca
R3CM1W		11/13/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R3CM1W		11/13/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R3CM1W		11/13/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	UJ	0.3	ug/l
R3CM1W		11/13/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	UJ	0.2	ug/l
R3CM1W		11/13/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l
R3CM1W		11/13/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3CM1W		11/13/2002	Sample	7439-92-1	T	Lead	0.0028	J	0.005	mg/l
R3CM1W		11/13/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R3CM1W		11/13/2002	Sample	7439-96-5	T	Manganese	0.082		0.01	mg/l
R3CM1W		11/13/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R3CM1W		11/13/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R3CM1W		11/13/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R3CM1W		11/13/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R3CM1W		11/13/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	0.33	J	8.8	ug/l
R3CM1W		11/13/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	UJ	0.1	ug/l
R3CM1W		11/13/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R3CM1W		11/13/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	UJ	0.5	ug/l
R3CM1W		11/13/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	UJ	0.3	ug/l
R3CM1W		11/13/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R3CM1W		11/13/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	UJ	0.2	ug/l
R3CM1W		11/13/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R3CM1W		11/13/2002	Sample	7440-09-7	T	Potassium	3.4		0.01	mg/l
R3CM1W		11/13/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R3CM1W		11/13/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R3CM1W		11/13/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R3CM1W		11/13/2002	Sample	7440-23-5	T	Sodium	20	J	80	mg/l
R3CM1W		11/13/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	UJ	0.2	ug/l
R3CM1W		11/13/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R3CM1W		11/13/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R3CM1W		11/13/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	UJ	0.1	ug/l
R3CM1W		11/13/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R3CM1W		11/13/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R3CM1W		11/13/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R3CM1W		11/13/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-39-3	D	Barium	0.049		0.01	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7439-89-6	D	Iron	0.05	U	0.05	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-09-7	D	Potassium	3.2		0.01	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-23-5	D	Sodium	19	J	80	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R3CM1W-Filtered	R3CM1W	11/13/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R3AD1W		11/12/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R3AD1W		11/12/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	107-06-2	T	1,2-Dichloroethane	0.26	J	1	ug/l
R3AD1W		11/12/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R3AD1W		11/12/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AD1W		11/12/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R3AD1W		11/12/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R3AD1W		11/12/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	94-75-7	T	2,4-D	3.2		0.5	ug/l
R3AD1W		11/12/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R3AD1W		11/12/2002	Sample	120-83-2	T	2,4-Dichlorophenol	2.8	J	10	ug/l
R3AD1W		11/12/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R3AD1W		11/12/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	95-57-8	T	2-Chlorophenol	2	J	10	ug/l
R3AD1W		11/12/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R3AD1W		11/12/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R3AD1W		11/12/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R3AD1W		11/12/2002	Sample	72-54-8	T	4,4'-DDD	0.1	UJ	0.1	ug/l
R3AD1W		11/12/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R3AD1W		11/12/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R3AD1W		11/12/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R3AD1W		11/12/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R3AD1W		11/12/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R3AD1W		11/12/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R3AD1W		11/12/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R3AD1W		11/12/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R3AD1W		11/12/2002	Sample	7429-90-5	T	Aluminum	0.86	J	0.02	mg/l
R3AD1W		11/12/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R3AD1W		11/12/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R3AD1W		11/12/2002	Sample	7440-39-3	T	Barium	0.063		0.01	mg/l
R3AD1W		11/12/2002	Sample	71-43-2	T	Benzene	0.34	J	1	ug/l
R3AD1W		11/12/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R3AD1W		11/12/2002	Sample	319-85-7	T	beta-BHC	0.0092	J	0.05	ug/l
R3AD1W		11/12/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R3AD1W		11/12/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	74-83-9	T	Bromomethane	1	UJ	1	ug/l
R3AD1W		11/12/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R3AD1W		11/12/2002	Sample	7440-70-2	T	Calcium	54		0.5	mg/l
R3AD1W		11/12/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R3AD1W		11/12/2002	Sample	108-90-7	T	Chlorobenzene	3.3		1	ug/l
R3AD1W		11/12/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R3AD1W		11/12/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R3AD1W		11/12/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R3AD1W		11/12/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R3AD1W		11/12/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AD1W		11/12/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R3AD1W		11/12/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R3AD1W		11/12/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R3AD1W		11/12/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R3AD1W		11/12/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R3AD1W		11/12/2002	Sample	120-36-5	T	Dichlorprop	0.81	J	6	ug/l
R3AD1W		11/12/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R3AD1W		11/12/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	88-85-7	T	Dinoseb	10	UJ	10	ug/l
R3AD1W		11/12/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R3AD1W		11/12/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R3AD1W		11/12/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R3AD1W		11/12/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R3AD1W		11/12/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	UJ	0.1	ug/l
R3AD1W		11/12/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R3AD1W		11/12/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R3AD1W		11/12/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R3AD1W		11/12/2002	Sample	E-11778	T	Hardness, Carbonate	370		200	Ca
R3AD1W		11/12/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R3AD1W		11/12/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R3AD1W		11/12/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R3AD1W		11/12/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R3AD1W		11/12/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	7439-89-6	T	Iron	1.2		0.05	mg/l
R3AD1W		11/12/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R3AD1W		11/12/2002	Sample	7439-95-4	T	Magnesium	22		0.5	mg/l
R3AD1W		11/12/2002	Sample	7439-96-5	T	Manganese	0.093		0.01	mg/l
R3AD1W		11/12/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R3AD1W		11/12/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R3AD1W		11/12/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R3AD1W		11/12/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R3AD1W		11/12/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R3AD1W		11/12/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R3AD1W		11/12/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R3AD1W		11/12/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R3AD1W		11/12/2002	Sample	106-47-8	T	P-Chloroaniline	9.4	J	20	ug/l
R3AD1W		11/12/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R3AD1W		11/12/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	108-95-2	T	Phenol	11		10	ug/l
R3AD1W		11/12/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R3AD1W		11/12/2002	Sample	7440-09-7	T	Potassium	3.7		0.01	mg/l
R3AD1W		11/12/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R3AD1W		11/12/2002	Sample	7782-49-2	T	Selenium	0.01	UJ	0.01	mg/l
R3AD1W		11/12/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R3AD1W		11/12/2002	Sample	7440-23-5	T	Sodium	23		80	mg/l
R3AD1W		11/12/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R3AD1W		11/12/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R3AD1W		11/12/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R3AD1W		11/12/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R3AD1W		11/12/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AD1W		11/12/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R3AD1W		11/12/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R3AD1W		11/12/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-39-3	D	Barium	0.051		0.01	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-70-2	D	Calcium	52		0.5	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7439-89-6	D	Iron	0.03	J	0.05	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7439-95-4	D	Magnesium	21		0.5	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-09-7	D	Potassium	3.6		0.01	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-23-5	D	Sodium	22	J	80	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R3AD1W-Filtered	R3AD1W	11/12/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R3BD1W		11/12/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R3BD1W		11/12/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	107-06-2	T	1,2-Dichloroethane	0.29	J	1	ug/l
R3BD1W		11/12/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R3BD1W		11/12/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R3BD1W		11/12/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R3BD1W		11/12/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	94-75-7	T	2,4-D	2.2		0.5	ug/l
R3BD1W		11/12/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R3BD1W		11/12/2002	Sample	120-83-2	T	2,4-Dichlorophenol	1.5	J	10	ug/l
R3BD1W		11/12/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R3BD1W		11/12/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R3BD1W		11/12/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R3BD1W		11/12/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R3BD1W		11/12/2002	Sample	72-54-8	T	4,4'-DDD	0.1	UJ	0.1	ug/l
R3BD1W		11/12/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R3BD1W		11/12/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R3BD1W		11/12/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R3BD1W		11/12/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R3BD1W		11/12/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R3BD1W		11/12/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R3BD1W		11/12/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l

Appendix II-C1
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Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BD1W		11/12/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R3BD1W		11/12/2002	Sample	7429-90-5	T	Aluminum	0.92	J	0.02	mg/l
R3BD1W		11/12/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R3BD1W		11/12/2002	Sample	7440-38-2	T	Arsenic	0.0054	J	0.01	mg/l
R3BD1W		11/12/2002	Sample	7440-39-3	T	Barium	0.065		0.01	mg/l
R3BD1W		11/12/2002	Sample	71-43-2	T	Benzene	0.28	J	1	ug/l
R3BD1W		11/12/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R3BD1W		11/12/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R3BD1W		11/12/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R3BD1W		11/12/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R3BD1W		11/12/2002	Sample	7440-70-2	T	Calcium	54		0.5	mg/l
R3BD1W		11/12/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R3BD1W		11/12/2002	Sample	108-90-7	T	Chlorobenzene	2.3		1	ug/l
R3BD1W		11/12/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R3BD1W		11/12/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R3BD1W		11/12/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	7440-48-4	T	Cobalt	0.00075	J	0.01	mg/l
R3BD1W		11/12/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R3BD1W		11/12/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R3BD1W		11/12/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R3BD1W		11/12/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R3BD1W		11/12/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R3BD1W		11/12/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R3BD1W		11/12/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R3BD1W		11/12/2002	Sample	120-36-5	T	Dichlorprop	0.53	J	6	ug/l
R3BD1W		11/12/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R3BD1W		11/12/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	88-85-7	T	Dinoseb	10	UJ	10	ug/l
R3BD1W		11/12/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R3BD1W		11/12/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R3BD1W		11/12/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R3BD1W		11/12/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R3BD1W		11/12/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	UJ	0.1	ug/l
R3BD1W		11/12/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R3BD1W		11/12/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R3BD1W		11/12/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R3BD1W		11/12/2002	Sample	E-11778	T	Hardness, Carbonate	290		200	Ca
R3BD1W		11/12/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R3BD1W		11/12/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R3BD1W		11/12/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R3BD1W		11/12/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R3BD1W		11/12/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	7439-89-6	T	Iron	1.3		0.05	mg/l
R3BD1W		11/12/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BD1W		11/12/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R3BD1W		11/12/2002	Sample	7439-95-4	T	Magnesium	22		0.5	mg/l
R3BD1W		11/12/2002	Sample	7439-96-5	T	Manganese	0.098		0.01	mg/l
R3BD1W		11/12/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R3BD1W		11/12/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R3BD1W		11/12/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R3BD1W		11/12/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R3BD1W		11/12/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R3BD1W		11/12/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R3BD1W		11/12/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R3BD1W		11/12/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R3BD1W		11/12/2002	Sample	106-47-8	T	P-Chloroaniline	5.2	J	20	ug/l
R3BD1W		11/12/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R3BD1W		11/12/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	108-95-2	T	Phenol	5.1	J	10	ug/l
R3BD1W		11/12/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R3BD1W		11/12/2002	Sample	7440-09-7	T	Potassium	3.7		0.01	mg/l
R3BD1W		11/12/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R3BD1W		11/12/2002	Sample	7782-49-2	T	Selenium	0.01	UJ	0.01	mg/l
R3BD1W		11/12/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R3BD1W		11/12/2002	Sample	7440-23-5	T	Sodium	23		80	mg/l
R3BD1W		11/12/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R3BD1W		11/12/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R3BD1W		11/12/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R3BD1W		11/12/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R3BD1W		11/12/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R3BD1W		11/12/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R3BD1W		11/12/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R3BD1W		11/12/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-39-3	D	Barium	0.052		0.01	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-70-2	D	Calcium	53		0.5	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7439-89-6	D	Iron	0.041	J	0.05	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7439-95-4	D	Magnesium	21		0.5	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-09-7	D	Potassium	3.6		0.01	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-23-5	D	Sodium	22	J	80	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R3BD1W-Filtered	R3BD1W	11/12/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R4AU1W		11/11/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R4AU1W		11/11/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	107-06-2	T	1,2-Dichloroethane	0.26	J	1	ug/l
R4AU1W		11/11/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R4AU1W		11/11/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AU1W		11/11/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R4AU1W		11/11/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R4AU1W		11/11/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	94-75-7	T	2,4-D	2.4		0.5	ug/l
R4AU1W		11/11/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R4AU1W		11/11/2002	Sample	120-83-2	T	2,4-Dichlorophenol	1.7	J	10	ug/l
R4AU1W		11/11/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R4AU1W		11/11/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R4AU1W		11/11/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R4AU1W		11/11/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R4AU1W		11/11/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R4AU1W		11/11/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R4AU1W		11/11/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R4AU1W		11/11/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R4AU1W		11/11/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R4AU1W		11/11/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	67-64-1	T	Acetone	40		18	ug/l
R4AU1W		11/11/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R4AU1W		11/11/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R4AU1W		11/11/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R4AU1W		11/11/2002	Sample	7429-90-5	T	Aluminum	0.81	J	0.02	mg/l
R4AU1W		11/11/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R4AU1W		11/11/2002	Sample	7440-38-2	T	Arsenic	0.0036	J	0.01	mg/l
R4AU1W		11/11/2002	Sample	7440-39-3	T	Barium	0.062		0.01	mg/l
R4AU1W		11/11/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R4AU1W		11/11/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R4AU1W		11/11/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R4AU1W		11/11/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R4AU1W		11/11/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R4AU1W		11/11/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R4AU1W		11/11/2002	Sample	108-90-7	T	Chlorobenzene	2.9		1	ug/l
R4AU1W		11/11/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	74-87-3	T	Chloromethane	0.96	J	0.5	ug/l
R4AU1W		11/11/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R4AU1W		11/11/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R4AU1W		11/11/2002	Sample	7440-50-8	T	Copper	0.01	U	0.01	mg/l
R4AU1W		11/11/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AU1W		11/11/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R4AU1W		11/11/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R4AU1W		11/11/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R4AU1W		11/11/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R4AU1W		11/11/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R4AU1W		11/11/2002	Sample	120-36-5	T	Dichlorprop	0.66	J	6	ug/l
R4AU1W		11/11/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R4AU1W		11/11/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	88-85-7	T	Dinoseb	10	UJ	10	ug/l
R4AU1W		11/11/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R4AU1W		11/11/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R4AU1W		11/11/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R4AU1W		11/11/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R4AU1W		11/11/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R4AU1W		11/11/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R4AU1W		11/11/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R4AU1W		11/11/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R4AU1W		11/11/2002	Sample	E-11778	T	Hardness, Carbonate	260		200	Ca
R4AU1W		11/11/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R4AU1W		11/11/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R4AU1W		11/11/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R4AU1W		11/11/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R4AU1W		11/11/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l
R4AU1W		11/11/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	7439-92-1	T	Lead	0.0031	J	0.005	mg/l
R4AU1W		11/11/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R4AU1W		11/11/2002	Sample	7439-96-5	T	Manganese	0.089		0.01	mg/l
R4AU1W		11/11/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R4AU1W		11/11/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R4AU1W		11/11/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R4AU1W		11/11/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R4AU1W		11/11/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R4AU1W		11/11/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R4AU1W		11/11/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R4AU1W		11/11/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R4AU1W		11/11/2002	Sample	106-47-8	T	P-Chloroaniline	5.7	J	20	ug/l
R4AU1W		11/11/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R4AU1W		11/11/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	108-95-2	T	Phenol	5.8	J	10	ug/l
R4AU1W		11/11/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R4AU1W		11/11/2002	Sample	7440-09-7	T	Potassium	3.6		0.01	mg/l
R4AU1W		11/11/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R4AU1W		11/11/2002	Sample	7782-49-2	T	Selenium	0.01	UJ	0.01	mg/l
R4AU1W		11/11/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R4AU1W		11/11/2002	Sample	7440-23-5	T	Sodium	23		80	mg/l
R4AU1W		11/11/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R4AU1W		11/11/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R4AU1W		11/11/2002	Sample	108-88-3	T	Toluene	0.64	J	1	ug/l
R4AU1W		11/11/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R4AU1W		11/11/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R4AU1W		11/11/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AU1W		11/11/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R4AU1W		11/11/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R4AU1W		11/11/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-39-3	D	Barium	0.053		0.01	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-70-2	D	Calcium	53		0.5	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7439-89-6	D	Iron	0.05	U	0.05	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7439-95-4	D	Magnesium	21		0.5	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-09-7	D	Potassium	3.6		0.01	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-23-5	D	Sodium	23	J	80	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R4AU1W-Filtered	R4AU1W	11/11/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R4BU1W		11/11/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R4BU1W		11/11/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	75-35-4	T	1,1-Dichloroethylene	0.35	J	1	ug/l
R4BU1W		11/11/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	107-06-2	T	1,2-Dichloroethane	0.31	J	1	ug/l
R4BU1W		11/11/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R4BU1W		11/11/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R4BU1W		11/11/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R4BU1W		11/11/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	94-75-7	T	2,4-D	1.7		0.5	ug/l
R4BU1W		11/11/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R4BU1W		11/11/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R4BU1W		11/11/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R4BU1W		11/11/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R4BU1W		11/11/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R4BU1W		11/11/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R4BU1W		11/11/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R4BU1W		11/11/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R4BU1W		11/11/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R4BU1W		11/11/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R4BU1W		11/11/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R4BU1W		11/11/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R4BU1W		11/11/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BU1W		11/11/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R4BU1W		11/11/2002	Sample	7429-90-5	T	Aluminum	0.7	J	0.02	mg/l
R4BU1W		11/11/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R4BU1W		11/11/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R4BU1W		11/11/2002	Sample	7440-39-3	T	Barium	0.064		0.01	mg/l
R4BU1W		11/11/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R4BU1W		11/11/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R4BU1W		11/11/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R4BU1W		11/11/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R4BU1W		11/11/2002	Sample	7440-70-2	T	Calcium	54		0.5	mg/l
R4BU1W		11/11/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R4BU1W		11/11/2002	Sample	108-90-7	T	Chlorobenzene	2.7		1	ug/l
R4BU1W		11/11/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R4BU1W		11/11/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R4BU1W		11/11/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	7440-48-4	T	Cobalt	0.0009	J	0.01	mg/l
R4BU1W		11/11/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R4BU1W		11/11/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R4BU1W		11/11/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R4BU1W		11/11/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R4BU1W		11/11/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R4BU1W		11/11/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R4BU1W		11/11/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R4BU1W		11/11/2002	Sample	120-36-5	T	Dichlorprop	0.49	J	6	ug/l
R4BU1W		11/11/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R4BU1W		11/11/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	88-85-7	T	Dinoseb	10	UJ	10	ug/l
R4BU1W		11/11/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R4BU1W		11/11/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R4BU1W		11/11/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R4BU1W		11/11/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R4BU1W		11/11/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R4BU1W		11/11/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R4BU1W		11/11/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R4BU1W		11/11/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R4BU1W		11/11/2002	Sample	E-11778	T	Hardness, Carbonate	280		200	Ca
R4BU1W		11/11/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R4BU1W		11/11/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R4BU1W		11/11/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R4BU1W		11/11/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R4BU1W		11/11/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	7439-89-6	T	Iron	1		0.05	mg/l
R4BU1W		11/11/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BU1W		11/11/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R4BU1W		11/11/2002	Sample	7439-95-4	T	Magnesium	22		0.5	mg/l
R4BU1W		11/11/2002	Sample	7439-96-5	T	Manganese	0.088		0.01	mg/l
R4BU1W		11/11/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R4BU1W		11/11/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R4BU1W		11/11/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R4BU1W		11/11/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R4BU1W		11/11/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R4BU1W		11/11/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R4BU1W		11/11/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R4BU1W		11/11/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R4BU1W		11/11/2002	Sample	106-47-8	T	P-Chloroaniline	3.2	J	20	ug/l
R4BU1W		11/11/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R4BU1W		11/11/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	108-95-2	T	Phenol	3.1	J	10	ug/l
R4BU1W		11/11/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R4BU1W		11/11/2002	Sample	7440-09-7	T	Potassium	3.7		0.01	mg/l
R4BU1W		11/11/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R4BU1W		11/11/2002	Sample	7782-49-2	T	Selenium	0.01	UJ	0.01	mg/l
R4BU1W		11/11/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R4BU1W		11/11/2002	Sample	7440-23-5	T	Sodium	23		80	mg/l
R4BU1W		11/11/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R4BU1W		11/11/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R4BU1W		11/11/2002	Sample	108-88-3	T	Toluene	0.59	J	1	ug/l
R4BU1W		11/11/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R4BU1W		11/11/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R4BU1W		11/11/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R4BU1W		11/11/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R4BU1W		11/11/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R4BU1W		11/11/2002	Sample	7440-66-6	T	Zinc	0.041		0.02	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-39-3	D	Barium	0.052		0.01	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-70-2	D	Calcium	53		0.5	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-48-4	D	Cobalt	0.00084	J	0.01	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7439-89-6	D	Iron	0.037	J	0.05	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7439-95-4	D	Magnesium	21		0.5	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-09-7	D	Potassium	3.6		0.01	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-23-5	D	Sodium	23	J	80	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R4BU1W-Filtered	R4BU1W	11/11/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R4AM1W		11/10/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R4AM1W		11/10/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	107-06-2	T	1,2-Dichloroethane	0.31	J	1	ug/l
R4AM1W		11/10/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R4AM1W		11/10/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AM1W		11/10/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R4AM1W		11/10/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R4AM1W		11/10/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	94-75-7	T	2,4-D	2.5		0.5	ug/l
R4AM1W		11/10/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R4AM1W		11/10/2002	Sample	120-83-2	T	2,4-Dichlorophenol	1.7	J	10	ug/l
R4AM1W		11/10/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R4AM1W		11/10/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	95-57-8	T	2-Chlorophenol	1.4	J	10	ug/l
R4AM1W		11/10/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R4AM1W		11/10/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R4AM1W		11/10/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R4AM1W		11/10/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R4AM1W		11/10/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R4AM1W		11/10/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R4AM1W		11/10/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R4AM1W		11/10/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R4AM1W		11/10/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R4AM1W		11/10/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R4AM1W		11/10/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R4AM1W		11/10/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R4AM1W		11/10/2002	Sample	7429-90-5	T	Aluminum	0.89	J	0.02	mg/l
R4AM1W		11/10/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R4AM1W		11/10/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R4AM1W		11/10/2002	Sample	7440-39-3	T	Barium	0.065		0.01	mg/l
R4AM1W		11/10/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R4AM1W		11/10/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R4AM1W		11/10/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R4AM1W		11/10/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R4AM1W		11/10/2002	Sample	7440-70-2	T	Calcium	54		0.5	mg/l
R4AM1W		11/10/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R4AM1W		11/10/2002	Sample	108-90-7	T	Chlorobenzene	3.5		1	ug/l
R4AM1W		11/10/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R4AM1W		11/10/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R4AM1W		11/10/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R4AM1W		11/10/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R4AM1W		11/10/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AM1W		11/10/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R4AM1W		11/10/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R4AM1W		11/10/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R4AM1W		11/10/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R4AM1W		11/10/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R4AM1W		11/10/2002	Sample	120-36-5	T	Dichlorprop	0.52	J	6	ug/l
R4AM1W		11/10/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R4AM1W		11/10/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	88-85-7	T	Dinoseb	10	UJ	10	ug/l
R4AM1W		11/10/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R4AM1W		11/10/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R4AM1W		11/10/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R4AM1W		11/10/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R4AM1W		11/10/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R4AM1W		11/10/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R4AM1W		11/10/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R4AM1W		11/10/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R4AM1W		11/10/2002	Sample	E-11778	T	Hardness, Carbonate	240		200	Ca
R4AM1W		11/10/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R4AM1W		11/10/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R4AM1W		11/10/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R4AM1W		11/10/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R4AM1W		11/10/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	7439-89-6	T	Iron	1.3		0.05	mg/l
R4AM1W		11/10/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R4AM1W		11/10/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R4AM1W		11/10/2002	Sample	7439-96-5	T	Manganese	0.099		0.01	mg/l
R4AM1W		11/10/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R4AM1W		11/10/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R4AM1W		11/10/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R4AM1W		11/10/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R4AM1W		11/10/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R4AM1W		11/10/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R4AM1W		11/10/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R4AM1W		11/10/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R4AM1W		11/10/2002	Sample	106-47-8	T	P-Chloroaniline	3.4	J	20	ug/l
R4AM1W		11/10/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R4AM1W		11/10/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	108-95-2	T	Phenol	5.3	J	10	ug/l
R4AM1W		11/10/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R4AM1W		11/10/2002	Sample	7440-09-7	T	Potassium	3.6		0.01	mg/l
R4AM1W		11/10/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R4AM1W		11/10/2002	Sample	7782-49-2	T	Selenium	0.01	UJ	0.01	mg/l
R4AM1W		11/10/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R4AM1W		11/10/2002	Sample	7440-23-5	T	Sodium	22		80	mg/l
R4AM1W		11/10/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R4AM1W		11/10/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R4AM1W		11/10/2002	Sample	108-88-3	T	Toluene	0.7	J	1	ug/l
R4AM1W		11/10/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R4AM1W		11/10/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R4AM1W		11/10/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AM1W		11/10/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R4AM1W		11/10/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R4AM1W		11/10/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7429-90-5	D	Aluminum	0.0092	J	0.02	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-39-3	D	Barium	0.052		0.01	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-70-2	D	Calcium	52		0.5	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7439-89-6	D	Iron	0.033	J	0.05	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-09-7	D	Potassium	3.5		0.01	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-23-5	D	Sodium	21	J	80	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R4AM1W-Filtered	R4AM1W	11/10/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R4BM1W		11/11/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R4BM1W		11/11/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	2.6E-06	U	0.0000026	ug/l
R4BM1W		11/11/2002	Sample	4	T	1,2,3,4,6,7,8-HpCDF	1.1E-06	U	0.0000011	ug/l
R4BM1W		11/11/2002	Sample	7	T	1,2,3,4,7,8,9-HpCDF	5.3E-07	U	5.3E-07	ug/l
R4BM1W		11/11/2002	Sample	6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	8.7E-07	U	8.7E-07	ug/l
R4BM1W		11/11/2002	Sample	9	T	1,2,3,4,7,8-HxCDF	8.9E-07	U	8.9E-07	ug/l
R4BM1W		11/11/2002	Sample	7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	8.2E-07	U	8.2E-07	ug/l
R4BM1W		11/11/2002	Sample	9	T	1,2,3,6,7,8-HxCDF	5.5E-07	U	5.5E-07	ug/l
R4BM1W		11/11/2002	Sample	3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	7.6E-07	U	7.6E-07	ug/l
R4BM1W		11/11/2002	Sample	9	T	1,2,3,7,8,9-HxCDF	6.8E-07	U	6.8E-07	ug/l
R4BM1W		11/11/2002	Sample	6	T	1,2,3,7,8-Pentachlorodibenzofuran	5.5E-07	U	5.5E-07	ug/l
R4BM1W		11/11/2002	Sample	4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	1.1E-06	U	0.0000011	ug/l
R4BM1W		11/11/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	107-06-2	T	1,2-Dichloroethane	0.21	J	1	ug/l
R4BM1W		11/11/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R4BM1W		11/11/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	5	T	2,3,4,6,7,8-HxCDF	6.2E-07	U	6.2E-07	ug/l
R4BM1W		11/11/2002	Sample	4	T	2,3,4,7,8-PeCDF	5.3E-07	U	5.3E-07	ug/l
R4BM1W		11/11/2002	Sample	1746-01-6	T	2,3,7,8-TCDD	6.3E-07	U	6.3E-07	ug/l
R4BM1W		11/11/2002	Sample	9	T	2,3,7,8-Tetrachlorodibenzofuran	7.8E-07	U	7.8E-07	ug/l
R4BM1W		11/11/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R4BM1W		11/11/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R4BM1W		11/11/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	94-75-7	T	2,4-D	1.7		0.5	ug/l
R4BM1W		11/11/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R4BM1W		11/11/2002	Sample	120-83-2	T	2,4-Dichlorophenol	1.2	J	10	ug/l
R4BM1W		11/11/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R4BM1W		11/11/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R4BM1W		11/11/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R4BM1W		11/11/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BM1W		11/11/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R4BM1W		11/11/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R4BM1W		11/11/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R4BM1W		11/11/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R4BM1W		11/11/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R4BM1W		11/11/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R4BM1W		11/11/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R4BM1W		11/11/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R4BM1W		11/11/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R4BM1W		11/11/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R4BM1W		11/11/2002	Sample	7429-90-5	T	Aluminum	0.77	J	0.02	mg/l
R4BM1W		11/11/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R4BM1W		11/11/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R4BM1W		11/11/2002	Sample	7440-39-3	T	Barium	0.061		0.01	mg/l
R4BM1W		11/11/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R4BM1W		11/11/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R4BM1W		11/11/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R4BM1W		11/11/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R4BM1W		11/11/2002	Sample	7440-70-2	T	Calcium	53		0.5	mg/l
R4BM1W		11/11/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R4BM1W		11/11/2002	Sample	108-90-7	T	Chlorobenzene	2.2		1	ug/l
R4BM1W		11/11/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R4BM1W		11/11/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R4BM1W		11/11/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R4BM1W		11/11/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R4BM1W		11/11/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R4BM1W		11/11/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R4BM1W		11/11/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R4BM1W		11/11/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R4BM1W		11/11/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R4BM1W		11/11/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R4BM1W		11/11/2002	Sample	120-36-5	T	Dichlorprop	0.41	J	6	ug/l
R4BM1W		11/11/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R4BM1W		11/11/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	88-85-7	T	Dinoseb	10	UJ	10	ug/l
R4BM1W		11/11/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R4BM1W		11/11/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R4BM1W		11/11/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R4BM1W		11/11/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R4BM1W		11/11/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R4BM1W		11/11/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R4BM1W		11/11/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BM1W		11/11/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R4BM1W		11/11/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R4BM1W		11/11/2002	Sample	E-11778	T	Hardness, Carbonate	270		200	Ca
R4BM1W		11/11/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R4BM1W		11/11/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R4BM1W		11/11/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R4BM1W		11/11/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R4BM1W		11/11/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l
R4BM1W		11/11/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	7439-92-1	T	Lead	0.0049	J	0.005	mg/l
R4BM1W		11/11/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R4BM1W		11/11/2002	Sample	7439-96-5	T	Manganese	0.087		0.01	mg/l
R4BM1W		11/11/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R4BM1W		11/11/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R4BM1W		11/11/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R4BM1W		11/11/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R4BM1W		11/11/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R4BM1W		11/11/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R4BM1W		11/11/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R4BM1W		11/11/2002	Sample	3268-87-9	T	OCDD	4.4E-05	U	0.000044	ug/l
R4BM1W		11/11/2002	Sample	0	T	OCDF	1.8E-06	U	0.0000018	ug/l
R4BM1W		11/11/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R4BM1W		11/11/2002	Sample	106-47-8	T	P-Chloroaniline	4	J	20	ug/l
R4BM1W		11/11/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R4BM1W		11/11/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	108-95-2	T	Phenol	3.9	J	10	ug/l
R4BM1W		11/11/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R4BM1W		11/11/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R4BM1W		11/11/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R4BM1W		11/11/2002	Sample	7782-49-2	T	Selenium	0.01	UJ	0.01	mg/l
R4BM1W		11/11/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R4BM1W		11/11/2002	Sample	7440-23-5	T	Sodium	21		80	mg/l
R4BM1W		11/11/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R4BM1W		11/11/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R4BM1W		11/11/2002	Sample	108-88-3	T	Toluene	0.39	J	1	ug/l
R4BM1W		11/11/2002	Sample	4	T	Total HpCDD	2.6E-06	U	0.0000026	ug/l
R4BM1W		11/11/2002	Sample	3	T	Total HpCDF	1.1E-06	U	0.0000011	ug/l
R4BM1W		11/11/2002	Sample	8	T	Total HxCDD	8.7E-07	U	8.7E-07	ug/l
R4BM1W		11/11/2002	Sample	1	T	Total HxCDF	8.9E-07	U	8.9E-07	ug/l
R4BM1W		11/11/2002	Sample	9	T	Total PeCDD	2.5E-06	U	0.0000025	ug/l
R4BM1W		11/11/2002	Sample	4	T	Total PeCDF	8.3E-07	U	8.3E-07	ug/l
R4BM1W		11/11/2002	Sample	5	T	Total TCDD	6.3E-07	U	6.3E-07	ug/l
R4BM1W		11/11/2002	Sample	5	T	Total TCDF	7.8E-07	U	7.8E-07	ug/l
R4BM1W		11/11/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R4BM1W		11/11/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R4BM1W		11/11/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R4BM1W		11/11/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R4BM1W		11/11/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R4BM1W		11/11/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-39-3	D	Barium	0.051		0.01	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-70-2	D	Calcium	51		0.5	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7439-89-6	D	Iron	0.043	J	0.05	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7439-95-4	D	Magnesium	22		0.5	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-09-7	D	Potassium	3.4		0.01	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-23-5	D	Sodium	20	J	80	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R4BM1W-Filtered	R4BM1W	11/11/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R4CM1W		11/11/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R4CM1W		11/11/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	75-35-4	T	1,1-Dichloroethylene	0.3	J	1	ug/l
R4CM1W		11/11/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R4CM1W		11/11/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R4CM1W		11/11/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R4CM1W		11/11/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R4CM1W		11/11/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R4CM1W		11/11/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R4CM1W		11/11/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	17		10	ug/l
R4CM1W		11/11/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R4CM1W		11/11/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R4CM1W		11/11/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R4CM1W		11/11/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R4CM1W		11/11/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R4CM1W		11/11/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R4CM1W		11/11/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R4CM1W		11/11/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R4CM1W		11/11/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R4CM1W		11/11/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R4CM1W		11/11/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R4CM1W		11/11/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R4CM1W		11/11/2002	Sample	7429-90-5	T	Aluminum	0.82	J	0.02	mg/l
R4CM1W		11/11/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R4CM1W		11/11/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R4CM1W		11/11/2002	Sample	7440-39-3	T	Barium	0.061		0.01	mg/l
R4CM1W		11/11/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM1W		11/11/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R4CM1W		11/11/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R4CM1W		11/11/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R4CM1W		11/11/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R4CM1W		11/11/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R4CM1W		11/11/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R4CM1W		11/11/2002	Sample	108-90-7	T	Chlorobenzene	0.56	J	1	ug/l
R4CM1W		11/11/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R4CM1W		11/11/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R4CM1W		11/11/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	7440-48-4	T	Cobalt	0.00082	J	0.01	mg/l
R4CM1W		11/11/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R4CM1W		11/11/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R4CM1W		11/11/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R4CM1W		11/11/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R4CM1W		11/11/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R4CM1W		11/11/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R4CM1W		11/11/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R4CM1W		11/11/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R4CM1W		11/11/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R4CM1W		11/11/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	88-85-7	T	Dinoseb	10	UJ	10	ug/l
R4CM1W		11/11/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R4CM1W		11/11/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R4CM1W		11/11/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R4CM1W		11/11/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R4CM1W		11/11/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R4CM1W		11/11/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R4CM1W		11/11/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R4CM1W		11/11/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R4CM1W		11/11/2002	Sample	E-11778	T	Hardness, Carbonate	260		200	Ca
R4CM1W		11/11/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R4CM1W		11/11/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R4CM1W		11/11/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R4CM1W		11/11/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R4CM1W		11/11/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l
R4CM1W		11/11/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R4CM1W		11/11/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R4CM1W		11/11/2002	Sample	7439-96-5	T	Manganese	0.083		0.01	mg/l
R4CM1W		11/11/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R4CM1W		11/11/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R4CM1W		11/11/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R4CM1W		11/11/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R4CM1W		11/11/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R4CM1W		11/11/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R4CM1W		11/11/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM1W		11/11/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R4CM1W		11/11/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R4CM1W		11/11/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R4CM1W		11/11/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R4CM1W		11/11/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R4CM1W		11/11/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R4CM1W		11/11/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R4CM1W		11/11/2002	Sample	7782-49-2	T	Selenium	0.01	UJ	0.01	mg/l
R4CM1W		11/11/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R4CM1W		11/11/2002	Sample	7440-23-5	T	Sodium	20		80	mg/l
R4CM1W		11/11/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R4CM1W		11/11/2002	Sample	127-18-4	T	Tetrachloroethene	0.45	J	1	ug/l
R4CM1W		11/11/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R4CM1W		11/11/2002	Sample	108-88-3	T	Toluene	0.29	J	1	ug/l
R4CM1W		11/11/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R4CM1W		11/11/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R4CM1W		11/11/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R4CM1W		11/11/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R4CM1W		11/11/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R4CM1W		11/11/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7429-90-5	D	Aluminum	0.012	J	0.02	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-39-3	D	Barium	0.05		0.01	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-70-2	D	Calcium	51		0.5	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7439-89-6	D	Iron	0.05	U	0.05	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-09-7	D	Potassium	3.4		0.01	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-23-5	D	Sodium	20	J	80	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R4CM1W-Filtered	R4CM1W	11/11/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM2W	R4CM1W	11/11/2002	Duplicate	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	83-32-9	T	Acenaphthene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	67-64-1	T	Acetone	25	U	25	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7429-90-5	T	Aluminum	0.7	J	0.02	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	120-12-7	T	Anthracene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-39-3	T	Barium	0.059		0.01	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	71-43-2	T	Benzene	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	75-25-2	T	Bromoform	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	74-83-9	T	Bromomethane	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-70-2	T	Calcium	51		0.5	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	86-74-8	T	Carbazole	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	108-90-7	T	Chlorobenzene	0.54	J	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	75-00-3	T	Chloroethane	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	67-66-3	T	Chloroform	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	218-01-9	T	Chrysene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	75-99-0	T	Dalapon	120	U	120	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	75-09-2	T	Dichloromethane	5	U	5	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	120-36-5	T	Dichlorprop	6	U	6	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM2W	R4CM1W	11/11/2002	Duplicate	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	88-85-7	T	Dinoseb	10	UJ	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	9	T	Endosulfan II	0.1	U	0.1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	206-44-0	T	Fluoranthene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	86-73-7	T	Fluorene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	E-11778	T	Hardness, Carbonate	230		200	Ca
R4CM2W	R4CM1W	11/11/2002	Duplicate	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7439-89-6	T	Iron	0.99		0.05	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	78-59-1	T	Isophorone	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7439-95-4	T	Magnesium	20		0.5	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7439-96-5	T	Manganese	0.081		0.01	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	93-65-2	T	MCPP	120	U	120	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	91-20-3	T	Naphthalene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	85-01-8	T	Phenanthrene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	108-95-2	T	Phenol	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-09-7	T	Potassium	3.5		0.01	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	129-00-0	T	Pyrene	10	U	10	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7782-49-2	T	Selenium	0.01	UJ	0.01	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-23-5	T	Sodium	20		80	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	108-88-3	T	Toluene	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	8001-35-2	T	Toxaphene	5	U	5	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R4CM2W	R4CM1W	11/11/2002	Duplicate	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-39-3	D	Barium	0.051		0.01	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-70-2	D	Calcium	51		0.5	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7439-89-6	D	Iron	0.029	J	0.05	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7439-95-4	D	Magnesium	20		0.5	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-09-7	D	Potassium	3.4		0.01	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-23-5	D	Sodium	20	J	80	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R4CM2W-Filtered	R4CM2W	11/11/2002	Duplicate	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R4AD1W		11/10/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R4AD1W		11/10/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	107-06-2	T	1,2-Dichloroethane	0.34	J	1	ug/l
R4AD1W		11/10/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R4AD1W		11/10/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R4AD1W		11/10/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R4AD1W		11/10/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	94-75-7	T	2,4-D	2.8		0.5	ug/l
R4AD1W		11/10/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R4AD1W		11/10/2002	Sample	120-83-2	T	2,4-Dichlorophenol	2	J	10	ug/l
R4AD1W		11/10/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R4AD1W		11/10/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	95-57-8	T	2-Chlorophenol	1.5	J	10	ug/l
R4AD1W		11/10/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R4AD1W		11/10/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R4AD1W		11/10/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R4AD1W		11/10/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R4AD1W		11/10/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R4AD1W		11/10/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R4AD1W		11/10/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R4AD1W		11/10/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R4AD1W		11/10/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R4AD1W		11/10/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R4AD1W		11/10/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R4AD1W		11/10/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R4AD1W		11/10/2002	Sample	7429-90-5	T	Aluminum	0.96	J	0.02	mg/l
R4AD1W		11/10/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R4AD1W		11/10/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R4AD1W		11/10/2002	Sample	7440-39-3	T	Barium	0.064		0.01	mg/l
R4AD1W		11/10/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AD1W		11/10/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R4AD1W		11/10/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R4AD1W		11/10/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R4AD1W		11/10/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R4AD1W		11/10/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R4AD1W		11/10/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R4AD1W		11/10/2002	Sample	108-90-7	T	Chlorobenzene	3.6		1	ug/l
R4AD1W		11/10/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R4AD1W		11/10/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R4AD1W		11/10/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R4AD1W		11/10/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R4AD1W		11/10/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R4AD1W		11/10/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R4AD1W		11/10/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R4AD1W		11/10/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R4AD1W		11/10/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R4AD1W		11/10/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R4AD1W		11/10/2002	Sample	120-36-5	T	Dichlorprop	0.65	J	6	ug/l
R4AD1W		11/10/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R4AD1W		11/10/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	88-85-7	T	Dinoseb	10	UJ	10	ug/l
R4AD1W		11/10/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R4AD1W		11/10/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R4AD1W		11/10/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R4AD1W		11/10/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R4AD1W		11/10/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R4AD1W		11/10/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R4AD1W		11/10/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R4AD1W		11/10/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R4AD1W		11/10/2002	Sample	E-11778	T	Hardness, Carbonate	270		200	Ca
R4AD1W		11/10/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R4AD1W		11/10/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R4AD1W		11/10/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R4AD1W		11/10/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R4AD1W		11/10/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	7439-89-6	T	Iron	1.4		0.05	mg/l
R4AD1W		11/10/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R4AD1W		11/10/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R4AD1W		11/10/2002	Sample	7439-96-5	T	Manganese	0.1		0.01	mg/l
R4AD1W		11/10/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R4AD1W		11/10/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R4AD1W		11/10/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R4AD1W		11/10/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R4AD1W		11/10/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R4AD1W		11/10/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R4AD1W		11/10/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l

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Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AD1W		11/10/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R4AD1W		11/10/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R4AD1W		11/10/2002	Sample	106-47-8	T	P-Chloroaniline	8.1	J	20	ug/l
R4AD1W		11/10/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R4AD1W		11/10/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	108-95-2	T	Phenol	5.9	J	10	ug/l
R4AD1W		11/10/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R4AD1W		11/10/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R4AD1W		11/10/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R4AD1W		11/10/2002	Sample	7782-49-2	T	Selenium	0.01	UJ	0.01	mg/l
R4AD1W		11/10/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R4AD1W		11/10/2002	Sample	7440-23-5	T	Sodium	20		80	mg/l
R4AD1W		11/10/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R4AD1W		11/10/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R4AD1W		11/10/2002	Sample	108-88-3	T	Toluene	0.56	J	1	ug/l
R4AD1W		11/10/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R4AD1W		11/10/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R4AD1W		11/10/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R4AD1W		11/10/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R4AD1W		11/10/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R4AD1W		11/10/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-39-3	D	Barium	0.053		0.01	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-70-2	D	Calcium	52		0.5	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7439-89-6	D	Iron	0.05	U	0.05	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-09-7	D	Potassium	3.5		0.01	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-23-5	D	Sodium	21	J	80	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R4AD1W-Filtered	R4AD1W	11/10/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R4BD1W		11/10/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R4BD1W		11/10/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	75-35-4	T	1,1-Dichloroethylene	0.42	J	1	ug/l
R4BD1W		11/10/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R4BD1W		11/10/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R4BD1W		11/10/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R4BD1W		11/10/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R4BD1W		11/10/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R4BD1W		11/10/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R4BD1W		11/10/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BD1W		11/10/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R4BD1W		11/10/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R4BD1W		11/10/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R4BD1W		11/10/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R4BD1W		11/10/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R4BD1W		11/10/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R4BD1W		11/10/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R4BD1W		11/10/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R4BD1W		11/10/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R4BD1W		11/10/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R4BD1W		11/10/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R4BD1W		11/10/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R4BD1W		11/10/2002	Sample	7429-90-5	T	Aluminum	0.91	J	0.02	mg/l
R4BD1W		11/10/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R4BD1W		11/10/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R4BD1W		11/10/2002	Sample	7440-39-3	T	Barium	0.063		0.01	mg/l
R4BD1W		11/10/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R4BD1W		11/10/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R4BD1W		11/10/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R4BD1W		11/10/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R4BD1W		11/10/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R4BD1W		11/10/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	75-15-0	T	Carbon Disulfide	0.31	J	1	ug/l
R4BD1W		11/10/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R4BD1W		11/10/2002	Sample	108-90-7	T	Chlorobenzene	0.97	J	1	ug/l
R4BD1W		11/10/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R4BD1W		11/10/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R4BD1W		11/10/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	7440-48-4	T	Cobalt	0.00077	J	0.01	mg/l
R4BD1W		11/10/2002	Sample	7440-50-8	T	Copper	0.01	U	0.01	mg/l
R4BD1W		11/10/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R4BD1W		11/10/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R4BD1W		11/10/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R4BD1W		11/10/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R4BD1W		11/10/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R4BD1W		11/10/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R4BD1W		11/10/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R4BD1W		11/10/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R4BD1W		11/10/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BD1W		11/10/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	88-85-7	T	Dinoseb	10	UJ	10	ug/l
R4BD1W		11/10/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R4BD1W		11/10/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R4BD1W		11/10/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R4BD1W		11/10/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R4BD1W		11/10/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R4BD1W		11/10/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R4BD1W		11/10/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R4BD1W		11/10/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R4BD1W		11/10/2002	Sample	E-11778	T	Hardness, Carbonate	230		200	Ca
R4BD1W		11/10/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R4BD1W		11/10/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R4BD1W		11/10/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R4BD1W		11/10/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R4BD1W		11/10/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	7439-89-6	T	Iron	1.2		0.05	mg/l
R4BD1W		11/10/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R4BD1W		11/10/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R4BD1W		11/10/2002	Sample	7439-96-5	T	Manganese	0.089		0.01	mg/l
R4BD1W		11/10/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R4BD1W		11/10/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R4BD1W		11/10/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R4BD1W		11/10/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R4BD1W		11/10/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R4BD1W		11/10/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R4BD1W		11/10/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R4BD1W		11/10/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R4BD1W		11/10/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R4BD1W		11/10/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R4BD1W		11/10/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R4BD1W		11/10/2002	Sample	7440-09-7	T	Potassium	3.6		0.01	mg/l
R4BD1W		11/10/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R4BD1W		11/10/2002	Sample	7782-49-2	T	Selenium	0.01	UJ	0.01	mg/l
R4BD1W		11/10/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R4BD1W		11/10/2002	Sample	7440-23-5	T	Sodium	19		80	mg/l
R4BD1W		11/10/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R4BD1W		11/10/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R4BD1W		11/10/2002	Sample	108-88-3	T	Toluene	0.35	J	1	ug/l
R4BD1W		11/10/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R4BD1W		11/10/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R4BD1W		11/10/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R4BD1W		11/10/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R4BD1W		11/10/2002	Sample	1330-20-7	T	Xylenes, Total	0.2	J	2	ug/l
R4BD1W		11/10/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7429-90-5	D	Aluminum	0.0079	J	0.02	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-39-3	D	Barium	0.052		0.01	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-70-2	D	Calcium	51		0.5	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7439-89-6	D	Iron	0.022	J	0.05	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-09-7	D	Potassium	3.5		0.01	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-23-5	D	Sodium	19	J	80	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R4BD1W-Filtered	R4BD1W	11/10/2002	Sample	7440-66-6	D	Zinc	0.029	U	0.029	mg/l
R5AN1W		11/17/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R5AN1W		11/17/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R5AN1W		11/17/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R5AN1W		11/17/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R5AN1W		11/17/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	94-75-7	T	2,4-D	1.8	J	0.5	ug/l
R5AN1W		11/17/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R5AN1W		11/17/2002	Sample	120-83-2	T	2,4-Dichlorophenol	1.2	J	10	ug/l
R5AN1W		11/17/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R5AN1W		11/17/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R5AN1W		11/17/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R5AN1W		11/17/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R5AN1W		11/17/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R5AN1W		11/17/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R5AN1W		11/17/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R5AN1W		11/17/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R5AN1W		11/17/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R5AN1W		11/17/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R5AN1W		11/17/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R5AN1W		11/17/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R5AN1W		11/17/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R5AN1W		11/17/2002	Sample	7429-90-5	T	Aluminum	0.76	J	0.02	mg/l
R5AN1W		11/17/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R5AN1W		11/17/2002	Sample	7440-38-2	T	Arsenic	0.0061	J	0.01	mg/l
R5AN1W		11/17/2002	Sample	7440-39-3	T	Barium	0.061		0.01	mg/l
R5AN1W		11/17/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AN1W		11/17/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R5AN1W		11/17/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R5AN1W		11/17/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R5AN1W		11/17/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R5AN1W		11/17/2002	Sample	7440-70-2	T	Calcium	51		0.5	mg/l
R5AN1W		11/17/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R5AN1W		11/17/2002	Sample	108-90-7	T	Chlorobenzene	1.9		1	ug/l
R5AN1W		11/17/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	75-00-3	T	Chloroethane	1	UJ	1	ug/l
R5AN1W		11/17/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R5AN1W		11/17/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R5AN1W		11/17/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R5AN1W		11/17/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R5AN1W		11/17/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R5AN1W		11/17/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R5AN1W		11/17/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R5AN1W		11/17/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R5AN1W		11/17/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R5AN1W		11/17/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R5AN1W		11/17/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R5AN1W		11/17/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R5AN1W		11/17/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R5AN1W		11/17/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R5AN1W		11/17/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R5AN1W		11/17/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R5AN1W		11/17/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R5AN1W		11/17/2002	Sample	5	T	Endrin Ketone	0.023	J	0.1	ug/l
R5AN1W		11/17/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R5AN1W		11/17/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R5AN1W		11/17/2002	Sample	E-11778	T	Hardness, Carbonate	220		200	Ca
R5AN1W		11/17/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R5AN1W		11/17/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R5AN1W		11/17/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R5AN1W		11/17/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R5AN1W		11/17/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	7439-89-6	T	Iron	1		0.05	mg/l
R5AN1W		11/17/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R5AN1W		11/17/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R5AN1W		11/17/2002	Sample	7439-96-5	T	Manganese	0.084		0.01	mg/l
R5AN1W		11/17/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R5AN1W		11/17/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R5AN1W		11/17/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R5AN1W		11/17/2002	Sample	72-43-5	T	Methoxychlor	0.5	UJ	0.5	ug/l
R5AN1W		11/17/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R5AN1W		11/17/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R5AN1W		11/17/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l

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Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AN1W		11/17/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R5AN1W		11/17/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R5AN1W		11/17/2002	Sample	106-47-8	T	P-Chloroaniline	1.4	J	20	ug/l
R5AN1W		11/17/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R5AN1W		11/17/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R5AN1W		11/17/2002	Sample	7440-09-7	T	Potassium	3.3		0.01	mg/l
R5AN1W		11/17/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R5AN1W		11/17/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R5AN1W		11/17/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R5AN1W		11/17/2002	Sample	7440-23-5	T	Sodium	21		80	mg/l
R5AN1W		11/17/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R5AN1W		11/17/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R5AN1W		11/17/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R5AN1W		11/17/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R5AN1W		11/17/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	7440-62-2	T	Vanadium	0.0034	J	0.01	mg/l
R5AN1W		11/17/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R5AN1W		11/17/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R5AN1W		11/17/2002	Sample	7440-66-6	T	Zinc	0.0042	J	0.02	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7429-90-5	D	Aluminum	0.2	UJ	0.2	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-39-3	D	Barium	0.051		0.01	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7439-89-6	D	Iron	0.05	U	0.05	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-09-7	D	Potassium	3.1		0.01	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-23-5	D	Sodium	21		80	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R5AN1W-Filtered	R5AN1W	11/17/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R5BN1W		11/17/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R5BN1W		11/17/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	0.36	J	2	ug/l
R5BN1W		11/17/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R5BN1W		11/17/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R5BN1W		11/17/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	94-75-7	T	2,4-D	1.6	J	0.5	ug/l
R5BN1W		11/17/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R5BN1W		11/17/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	UJ	50	ug/l
R5BN1W		11/17/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BN1W		11/17/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	88-74-4	T	2-Nitroaniline	50	UJ	50	ug/l
R5BN1W		11/17/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R5BN1W		11/17/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	99-09-2	T	3-Nitroaniline	50	UJ	50	ug/l
R5BN1W		11/17/2002	Sample	72-54-8	T	4,4'-DDD	0.1	UJ	0.1	ug/l
R5BN1W		11/17/2002	Sample	72-55-9	T	4,4'-DDE	0.1	UJ	0.1	ug/l
R5BN1W		11/17/2002	Sample	50-29-3	T	4,4'-DDT	0.1	UJ	0.1	ug/l
R5BN1W		11/17/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R5BN1W		11/17/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R5BN1W		11/17/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R5BN1W		11/17/2002	Sample	309-00-2	T	Aldrin	0.05	UJ	0.05	ug/l
R5BN1W		11/17/2002	Sample	319-84-6	T	alpha-BHC	0.05	UJ	0.05	ug/l
R5BN1W		11/17/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	UJ	0.05	ug/l
R5BN1W		11/17/2002	Sample	7429-90-5	T	Aluminum	0.69	J	0.02	mg/l
R5BN1W		11/17/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R5BN1W		11/17/2002	Sample	7440-38-2	T	Arsenic	0.0032	J	0.01	mg/l
R5BN1W		11/17/2002	Sample	7440-39-3	T	Barium	0.061		0.01	mg/l
R5BN1W		11/17/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R5BN1W		11/17/2002	Sample	319-85-7	T	beta-BHC	0.05	UJ	0.05	ug/l
R5BN1W		11/17/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R5BN1W		11/17/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R5BN1W		11/17/2002	Sample	7440-70-2	T	Calcium	51		0.5	mg/l
R5BN1W		11/17/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R5BN1W		11/17/2002	Sample	108-90-7	T	Chlorobenzene	1.8		1	ug/l
R5BN1W		11/17/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	75-00-3	T	Chloroethane	1	UJ	1	ug/l
R5BN1W		11/17/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R5BN1W		11/17/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R5BN1W		11/17/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R5BN1W		11/17/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R5BN1W		11/17/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R5BN1W		11/17/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R5BN1W		11/17/2002	Sample	319-86-8	T	delta-BHC	0.05	UJ	0.05	ug/l
R5BN1W		11/17/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R5BN1W		11/17/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R5BN1W		11/17/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R5BN1W		11/17/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R5BN1W		11/17/2002	Sample	60-57-1	T	Dieldrin	0.1	UJ	0.1	ug/l
R5BN1W		11/17/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BN1W		11/17/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	959-98-8	T	Endosulfan I	0.05	UJ	0.05	ug/l
R5BN1W		11/17/2002	Sample	9	T	Endosulfan II	0.1	UJ	0.1	ug/l
R5BN1W		11/17/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	UJ	0.1	ug/l
R5BN1W		11/17/2002	Sample	72-20-8	T	Endrin	0.1	UJ	0.1	ug/l
R5BN1W		11/17/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	UJ	0.1	ug/l
R5BN1W		11/17/2002	Sample	5	T	Endrin Ketone	0.1	UJ	0.1	ug/l
R5BN1W		11/17/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	UJ	0.05	ug/l
R5BN1W		11/17/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	UJ	0.05	ug/l
R5BN1W		11/17/2002	Sample	E-11778	T	Hardness, Carbonate	220		200	Ca
R5BN1W		11/17/2002	Sample	76-44-8	T	Heptachlor	0.05	UJ	0.05	ug/l
R5BN1W		11/17/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	UJ	0.05	ug/l
R5BN1W		11/17/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R5BN1W		11/17/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R5BN1W		11/17/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	7439-89-6	T	Iron	0.99		0.05	mg/l
R5BN1W		11/17/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R5BN1W		11/17/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R5BN1W		11/17/2002	Sample	7439-96-5	T	Manganese	0.088		0.01	mg/l
R5BN1W		11/17/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R5BN1W		11/17/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R5BN1W		11/17/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R5BN1W		11/17/2002	Sample	72-43-5	T	Methoxychlor	0.5	UJ	0.5	ug/l
R5BN1W		11/17/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R5BN1W		11/17/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R5BN1W		11/17/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R5BN1W		11/17/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R5BN1W		11/17/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R5BN1W		11/17/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R5BN1W		11/17/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R5BN1W		11/17/2002	Sample	7440-09-7	T	Potassium	3.3		0.01	mg/l
R5BN1W		11/17/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R5BN1W		11/17/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R5BN1W		11/17/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R5BN1W		11/17/2002	Sample	7440-23-5	T	Sodium	21		80	mg/l
R5BN1W		11/17/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R5BN1W		11/17/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R5BN1W		11/17/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	8001-35-2	T	Toxaphene	5	UJ	5	ug/l
R5BN1W		11/17/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R5BN1W		11/17/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	7440-62-2	T	Vanadium	0.0034	J	0.01	mg/l
R5BN1W		11/17/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R5BN1W		11/17/2002	Sample	1330-20-7	T	Xylenes, Total	0.84	J	2	ug/l
R5BN1W		11/17/2002	Sample	7440-66-6	T	Zinc	0.0039	J	0.02	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7429-90-5	D	Aluminum	0.2	UJ	0.2	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-38-2	D	Arsenic	0.0055	J	0.01	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-39-3	D	Barium	0.051		0.01	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7439-89-6	D	Iron	0.05	U	0.05	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-09-7	D	Potassium	3.1		0.01	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-23-5	D	Sodium	21		80	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-62-2	D	Vanadium	0.0012	J	0.01	mg/l
R5BN1W-Filtered	R5BN1W	11/17/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R5AU1W		11/08/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R5AU1W		11/08/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R5AU1W		11/08/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R5AU1W		11/08/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R5AU1W		11/08/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	94-75-7	T	2,4-D	1.1		0.5	ug/l
R5AU1W		11/08/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R5AU1W		11/08/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R5AU1W		11/08/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R5AU1W		11/08/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R5AU1W		11/08/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R5AU1W		11/08/2002	Sample	72-54-8	T	4,4'-DDD	0.1	UJ	0.1	ug/l
R5AU1W		11/08/2002	Sample	72-55-9	T	4,4'-DDE	0.1	UJ	0.1	ug/l
R5AU1W		11/08/2002	Sample	50-29-3	T	4,4'-DDT	0.1	UJ	0.1	ug/l
R5AU1W		11/08/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R5AU1W		11/08/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R5AU1W		11/08/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R5AU1W		11/08/2002	Sample	309-00-2	T	Aldrin	0.05	UJ	0.05	ug/l
R5AU1W		11/08/2002	Sample	319-84-6	T	alpha-BHC	0.05	UJ	0.05	ug/l
R5AU1W		11/08/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	UJ	0.05	ug/l
R5AU1W		11/08/2002	Sample	7429-90-5	T	Aluminum	0.39	J	0.02	mg/l
R5AU1W		11/08/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R5AU1W		11/08/2002	Sample	7440-38-2	T	Arsenic	0.01	UJ	0.01	mg/l
R5AU1W		11/08/2002	Sample	7440-39-3	T	Barium	0.062		0.01	mg/l
R5AU1W		11/08/2002	Sample	71-43-2	T	Benzene	0.38	J	1	ug/l
R5AU1W		11/08/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AU1W		11/08/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R5AU1W		11/08/2002	Sample	319-85-7	T	beta-BHC	0.05	UJ	0.05	ug/l
R5AU1W		11/08/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R5AU1W		11/08/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R5AU1W		11/08/2002	Sample	7440-70-2	T	Calcium	53		0.5	mg/l
R5AU1W		11/08/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R5AU1W		11/08/2002	Sample	108-90-7	T	Chlorobenzene	1.3		1	ug/l
R5AU1W		11/08/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R5AU1W		11/08/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R5AU1W		11/08/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R5AU1W		11/08/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R5AU1W		11/08/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R5AU1W		11/08/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R5AU1W		11/08/2002	Sample	319-86-8	T	delta-BHC	0.05	UJ	0.05	ug/l
R5AU1W		11/08/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R5AU1W		11/08/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R5AU1W		11/08/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R5AU1W		11/08/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R5AU1W		11/08/2002	Sample	60-57-1	T	Dieldrin	0.1	UJ	0.1	ug/l
R5AU1W		11/08/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	959-98-8	T	Endosulfan I	0.05	UJ	0.05	ug/l
R5AU1W		11/08/2002	Sample	9	T	Endosulfan II	0.1	UJ	0.1	ug/l
R5AU1W		11/08/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	UJ	0.1	ug/l
R5AU1W		11/08/2002	Sample	72-20-8	T	Endrin	0.1	UJ	0.1	ug/l
R5AU1W		11/08/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	UJ	0.1	ug/l
R5AU1W		11/08/2002	Sample	5	T	Endrin Ketone	0.1	UJ	0.1	ug/l
R5AU1W		11/08/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	UJ	0.05	ug/l
R5AU1W		11/08/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	UJ	0.05	ug/l
R5AU1W		11/08/2002	Sample	E-11778	T	Hardness, Carbonate	200		200	Ca
R5AU1W		11/08/2002	Sample	76-44-8	T	Heptachlor	0.05	UJ	0.05	ug/l
R5AU1W		11/08/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	UJ	0.05	ug/l
R5AU1W		11/08/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R5AU1W		11/08/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R5AU1W		11/08/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	7439-89-6	T	Iron	0.68		0.05	mg/l
R5AU1W		11/08/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R5AU1W		11/08/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R5AU1W		11/08/2002	Sample	7439-96-5	T	Manganese	0.087		0.01	mg/l
R5AU1W		11/08/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R5AU1W		11/08/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R5AU1W		11/08/2002	Sample	7439-97-6	T	Mercury	0.0002	UJ	0.0002	mg/l
R5AU1W		11/08/2002	Sample	72-43-5	T	Methoxychlor	0.5	UJ	0.5	ug/l
R5AU1W		11/08/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R5AU1W		11/08/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R5AU1W		11/08/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AU1W		11/08/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R5AU1W		11/08/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R5AU1W		11/08/2002	Sample	106-47-8	T	P-Chloroaniline	2.2	J	20	ug/l
R5AU1W		11/08/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R5AU1W		11/08/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R5AU1W		11/08/2002	Sample	7440-09-7	T	Potassium	3.6		0.01	mg/l
R5AU1W		11/08/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R5AU1W		11/08/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R5AU1W		11/08/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R5AU1W		11/08/2002	Sample	7440-23-5	T	Sodium	22	J	80	mg/l
R5AU1W		11/08/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R5AU1W		11/08/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R5AU1W		11/08/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	8001-35-2	T	Toxaphene	5	UJ	5	ug/l
R5AU1W		11/08/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R5AU1W		11/08/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R5AU1W		11/08/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R5AU1W		11/08/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R5AU1W		11/08/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-36-0	D	Antimony	0.02	U	0.02	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-39-3	D	Barium	0.053		0.01	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-70-2	D	Calcium	51		0.5	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7439-89-6	D	Iron	0.035	J	0.05	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7439-97-6	D	Mercury	0.0002	UJ	0.0002	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-09-7	D	Potassium	3.4		0.01	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-23-5	D	Sodium	21	J	80	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R5AU1W-Filtered	R5AU1W	11/08/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R5BU1W		11/09/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R5BU1W		11/09/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R5BU1W		11/09/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R5BU1W		11/09/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R5BU1W		11/09/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	94-75-7	T	2,4-D	0.94		0.5	ug/l
R5BU1W		11/09/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R5BU1W		11/09/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R5BU1W		11/09/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BU1W		11/09/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R5BU1W		11/09/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R5BU1W		11/09/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R5BU1W		11/09/2002	Sample	72-54-8	T	4,4'-DDD	0.1	R	0.1	ug/l
R5BU1W		11/09/2002	Sample	72-55-9	T	4,4'-DDE	0.1	R	0.1	ug/l
R5BU1W		11/09/2002	Sample	50-29-3	T	4,4'-DDT	0.1	R	0.1	ug/l
R5BU1W		11/09/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R5BU1W		11/09/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R5BU1W		11/09/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R5BU1W		11/09/2002	Sample	309-00-2	T	Aldrin	0.05	R	0.05	ug/l
R5BU1W		11/09/2002	Sample	319-84-6	T	alpha-BHC	0.05	R	0.05	ug/l
R5BU1W		11/09/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	R	0.05	ug/l
R5BU1W		11/09/2002	Sample	7429-90-5	T	Aluminum	0.73	J	0.02	mg/l
R5BU1W		11/09/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R5BU1W		11/09/2002	Sample	7440-38-2	T	Arsenic	0.01	UJ	0.01	mg/l
R5BU1W		11/09/2002	Sample	7440-39-3	T	Barium	0.062		0.01	mg/l
R5BU1W		11/09/2002	Sample	71-43-2	T	Benzene	0.23	J	1	ug/l
R5BU1W		11/09/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R5BU1W		11/09/2002	Sample	319-85-7	T	beta-BHC	0.05	R	0.05	ug/l
R5BU1W		11/09/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R5BU1W		11/09/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R5BU1W		11/09/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R5BU1W		11/09/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R5BU1W		11/09/2002	Sample	108-90-7	T	Chlorobenzene	1.3		1	ug/l
R5BU1W		11/09/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R5BU1W		11/09/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R5BU1W		11/09/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	7440-48-4	T	Cobalt	0.00075	J	0.01	mg/l
R5BU1W		11/09/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R5BU1W		11/09/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R5BU1W		11/09/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R5BU1W		11/09/2002	Sample	319-86-8	T	delta-BHC	0.05	R	0.05	ug/l
R5BU1W		11/09/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R5BU1W		11/09/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R5BU1W		11/09/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R5BU1W		11/09/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R5BU1W		11/09/2002	Sample	60-57-1	T	Dieldrin	0.1	R	0.1	ug/l
R5BU1W		11/09/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BU1W		11/09/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	959-98-8	T	Endosulfan I	0.05	R	0.05	ug/l
R5BU1W		11/09/2002	Sample	9	T	Endosulfan II	0.1	R	0.1	ug/l
R5BU1W		11/09/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	R	0.1	ug/l
R5BU1W		11/09/2002	Sample	72-20-8	T	Endrin	0.1	R	0.1	ug/l
R5BU1W		11/09/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	R	0.1	ug/l
R5BU1W		11/09/2002	Sample	5	T	Endrin Ketone	0.1	R	0.1	ug/l
R5BU1W		11/09/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	R	0.05	ug/l
R5BU1W		11/09/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	R	0.05	ug/l
R5BU1W		11/09/2002	Sample	E-11778	T	Hardness, Carbonate	220		200	Ca
R5BU1W		11/09/2002	Sample	76-44-8	T	Heptachlor	0.05	R	0.05	ug/l
R5BU1W		11/09/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	R	0.05	ug/l
R5BU1W		11/09/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R5BU1W		11/09/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R5BU1W		11/09/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	7439-89-6	T	Iron	1		0.05	mg/l
R5BU1W		11/09/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	7439-92-1	T	Lead	0.0027	J	0.005	mg/l
R5BU1W		11/09/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R5BU1W		11/09/2002	Sample	7439-96-5	T	Manganese	0.083		0.01	mg/l
R5BU1W		11/09/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R5BU1W		11/09/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R5BU1W		11/09/2002	Sample	7439-97-6	T	Mercury	0.0002	UJ	0.0002	mg/l
R5BU1W		11/09/2002	Sample	72-43-5	T	Methoxychlor	0.5	R	0.5	ug/l
R5BU1W		11/09/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R5BU1W		11/09/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R5BU1W		11/09/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R5BU1W		11/09/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R5BU1W		11/09/2002	Sample	106-47-8	T	P-Chloroaniline	2.3	J	20	ug/l
R5BU1W		11/09/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R5BU1W		11/09/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R5BU1W		11/09/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R5BU1W		11/09/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R5BU1W		11/09/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R5BU1W		11/09/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R5BU1W		11/09/2002	Sample	7440-23-5	T	Sodium	19	J	80	mg/l
R5BU1W		11/09/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R5BU1W		11/09/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R5BU1W		11/09/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	8001-35-2	T	Toxaphene	5	R	5	ug/l
R5BU1W		11/09/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R5BU1W		11/09/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R5BU1W		11/09/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R5BU1W		11/09/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R5BU1W		11/09/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-36-0	D	Antimony	0.02	U	0.02	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-39-3	D	Barium	0.053		0.01	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-70-2	D	Calcium	52		0.5	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7439-89-6	D	Iron	0.051		0.05	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7439-95-4	D	Magnesium	21		0.5	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7439-97-6	D	Mercury	0.0002	UJ	0.0002	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-09-7	D	Potassium	3.4		0.01	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-23-5	D	Sodium	19	J	80	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R5BU1W-Filtered	R5BU1W	11/09/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R5AM1W		11/08/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R5AM1W		11/08/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R5AM1W		11/08/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R5AM1W		11/08/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R5AM1W		11/08/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	94-75-7	T	2,4-D	0.97		0.5	ug/l
R5AM1W		11/08/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R5AM1W		11/08/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R5AM1W		11/08/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R5AM1W		11/08/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R5AM1W		11/08/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R5AM1W		11/08/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R5AM1W		11/08/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R5AM1W		11/08/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R5AM1W		11/08/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R5AM1W		11/08/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R5AM1W		11/08/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R5AM1W		11/08/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R5AM1W		11/08/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R5AM1W		11/08/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R5AM1W		11/08/2002	Sample	7429-90-5	T	Aluminum	0.52	J	0.02	mg/l
R5AM1W		11/08/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R5AM1W		11/08/2002	Sample	7440-38-2	T	Arsenic	0.01	UJ	0.01	mg/l
R5AM1W		11/08/2002	Sample	7440-39-3	T	Barium	0.062		0.01	mg/l
R5AM1W		11/08/2002	Sample	71-43-2	T	Benzene	0.26	J	1	ug/l
R5AM1W		11/08/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AM1W		11/08/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R5AM1W		11/08/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R5AM1W		11/08/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R5AM1W		11/08/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R5AM1W		11/08/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R5AM1W		11/08/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R5AM1W		11/08/2002	Sample	108-90-7	T	Chlorobenzene	1.3		1	ug/l
R5AM1W		11/08/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R5AM1W		11/08/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R5AM1W		11/08/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R5AM1W		11/08/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R5AM1W		11/08/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R5AM1W		11/08/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R5AM1W		11/08/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R5AM1W		11/08/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R5AM1W		11/08/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R5AM1W		11/08/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R5AM1W		11/08/2002	Sample	120-36-5	T	Dichlorprop	0.11	J	6	ug/l
R5AM1W		11/08/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R5AM1W		11/08/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R5AM1W		11/08/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R5AM1W		11/08/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R5AM1W		11/08/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R5AM1W		11/08/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	UJ	0.1	ug/l
R5AM1W		11/08/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R5AM1W		11/08/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R5AM1W		11/08/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R5AM1W		11/08/2002	Sample	E-11778	T	Hardness, Carbonate	210		200	Ca
R5AM1W		11/08/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R5AM1W		11/08/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R5AM1W		11/08/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R5AM1W		11/08/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R5AM1W		11/08/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	7439-89-6	T	Iron	0.79		0.05	mg/l
R5AM1W		11/08/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R5AM1W		11/08/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R5AM1W		11/08/2002	Sample	7439-96-5	T	Manganese	0.086		0.01	mg/l
R5AM1W		11/08/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R5AM1W		11/08/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R5AM1W		11/08/2002	Sample	7439-97-6	T	Mercury	0.00014	J	0.0002	mg/l
R5AM1W		11/08/2002	Sample	72-43-5	T	Methoxychlor	0.5	UJ	0.5	ug/l
R5AM1W		11/08/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R5AM1W		11/08/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R5AM1W		11/08/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l

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Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AM1W		11/08/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R5AM1W		11/08/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R5AM1W		11/08/2002	Sample	106-47-8	T	P-Chloroaniline	1.8	J	20	ug/l
R5AM1W		11/08/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R5AM1W		11/08/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R5AM1W		11/08/2002	Sample	7440-09-7	T	Potassium	3.6		0.01	mg/l
R5AM1W		11/08/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R5AM1W		11/08/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R5AM1W		11/08/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R5AM1W		11/08/2002	Sample	7440-23-5	T	Sodium	22	J	80	mg/l
R5AM1W		11/08/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R5AM1W		11/08/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R5AM1W		11/08/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R5AM1W		11/08/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R5AM1W		11/08/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R5AM1W		11/08/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R5AM1W		11/08/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R5AM1W		11/08/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-39-3	D	Barium	0.054		0.01	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-70-2	D	Calcium	53		0.5	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7439-89-6	D	Iron	0.048	J	0.05	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7439-95-4	D	Magnesium	21		0.5	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7439-97-6	D	Mercury	0.00012	J	0.0002	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-09-7	D	Potassium	3.6		0.01	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-23-5	D	Sodium	22	J	80	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R5AM1W-Filtered	R5AM1W	11/08/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R5BM1W		11/09/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R5BM1W		11/09/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	1.8E-06	U	0.0000018	ug/l
R5BM1W		11/09/2002	Sample	4	T	1,2,3,4,6,7,8-HpCDF	7.5E-07	U	7.5E-07	ug/l
R5BM1W		11/09/2002	Sample	7	T	1,2,3,4,7,8,9-HpCDF	4.9E-07	U	4.9E-07	ug/l
R5BM1W		11/09/2002	Sample	6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	1.1E-06	U	0.0000011	ug/l
R5BM1W		11/09/2002	Sample	9	T	1,2,3,4,7,8-HxCDF	8.8E-07	U	8.8E-07	ug/l
R5BM1W		11/09/2002	Sample	7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	1E-06	U	0.000001	ug/l
R5BM1W		11/09/2002	Sample	9	T	1,2,3,6,7,8-HxCDF	8E-07	U	0.0000008	ug/l
R5BM1W		11/09/2002	Sample	3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	9.2E-07	U	9.2E-07	ug/l
R5BM1W		11/09/2002	Sample	9	T	1,2,3,7,8,9-HxCDF	9.9E-07	U	9.9E-07	ug/l
R5BM1W		11/09/2002	Sample	6	T	1,2,3,7,8-Pentachlorodibenzofuran	7.7E-07	U	7.7E-07	ug/l
R5BM1W		11/09/2002	Sample	4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	1.7E-06	U	0.0000017	ug/l
R5BM1W		11/09/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R5BM1W		11/09/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BM1W		11/09/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	5	T	2,3,4,6,7,8-HxCDF	9E-07	U	0.0000009	ug/l
R5BM1W		11/09/2002	Sample	4	T	2,3,4,7,8-PeCDF	7.4E-07	U	7.4E-07	ug/l
R5BM1W		11/09/2002	Sample	1746-01-6	T	2,3,7,8-TCDD	6.9E-07	UJ	6.9E-07	ug/l
R5BM1W		11/09/2002	Sample	9	T	2,3,7,8-Tetrachlorodibenzofuran	1.1E-06	U	0.0000011	ug/l
R5BM1W		11/09/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R5BM1W		11/09/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R5BM1W		11/09/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	94-75-7	T	2,4-D	1.1		0.5	ug/l
R5BM1W		11/09/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R5BM1W		11/09/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R5BM1W		11/09/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R5BM1W		11/09/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R5BM1W		11/09/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R5BM1W		11/09/2002	Sample	72-54-8	T	4,4'-DDD	0.1	UJ	0.1	ug/l
R5BM1W		11/09/2002	Sample	72-55-9	T	4,4'-DDE	0.1	UJ	0.1	ug/l
R5BM1W		11/09/2002	Sample	50-29-3	T	4,4'-DDT	0.1	UJ	0.1	ug/l
R5BM1W		11/09/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R5BM1W		11/09/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R5BM1W		11/09/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R5BM1W		11/09/2002	Sample	309-00-2	T	Aldrin	0.05	UJ	0.05	ug/l
R5BM1W		11/09/2002	Sample	319-84-6	T	alpha-BHC	0.05	UJ	0.05	ug/l
R5BM1W		11/09/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	UJ	0.05	ug/l
R5BM1W		11/09/2002	Sample	7429-90-5	T	Aluminum	0.72	J	0.02	mg/l
R5BM1W		11/09/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R5BM1W		11/09/2002	Sample	7440-38-2	T	Arsenic	0.01	UJ	0.01	mg/l
R5BM1W		11/09/2002	Sample	7440-39-3	T	Barium	0.062		0.01	mg/l
R5BM1W		11/09/2002	Sample	71-43-2	T	Benzene	0.24	J	1	ug/l
R5BM1W		11/09/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R5BM1W		11/09/2002	Sample	319-85-7	T	beta-BHC	0.05	UJ	0.05	ug/l
R5BM1W		11/09/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R5BM1W		11/09/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R5BM1W		11/09/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R5BM1W		11/09/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R5BM1W		11/09/2002	Sample	108-90-7	T	Chlorobenzene	1.2		1	ug/l
R5BM1W		11/09/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R5BM1W		11/09/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R5BM1W		11/09/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BM1W		11/09/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R5BM1W		11/09/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R5BM1W		11/09/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R5BM1W		11/09/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R5BM1W		11/09/2002	Sample	319-86-8	T	delta-BHC	0.05	UJ	0.05	ug/l
R5BM1W		11/09/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R5BM1W		11/09/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R5BM1W		11/09/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R5BM1W		11/09/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R5BM1W		11/09/2002	Sample	60-57-1	T	Dieldrin	0.1	UJ	0.1	ug/l
R5BM1W		11/09/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	959-98-8	T	Endosulfan I	0.05	UJ	0.05	ug/l
R5BM1W		11/09/2002	Sample	9	T	Endosulfan II	0.1	UJ	0.1	ug/l
R5BM1W		11/09/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	UJ	0.1	ug/l
R5BM1W		11/09/2002	Sample	72-20-8	T	Endrin	0.1	UJ	0.1	ug/l
R5BM1W		11/09/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	UJ	0.1	ug/l
R5BM1W		11/09/2002	Sample	5	T	Endrin Ketone	0.1	UJ	0.1	ug/l
R5BM1W		11/09/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	UJ	0.05	ug/l
R5BM1W		11/09/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	UJ	0.05	ug/l
R5BM1W		11/09/2002	Sample	E-11778	T	Hardness, Carbonate	210		200	Ca
R5BM1W		11/09/2002	Sample	76-44-8	T	Heptachlor	0.05	UJ	0.05	ug/l
R5BM1W		11/09/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	UJ	0.05	ug/l
R5BM1W		11/09/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R5BM1W		11/09/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R5BM1W		11/09/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	7439-89-6	T	Iron	1		0.05	mg/l
R5BM1W		11/09/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R5BM1W		11/09/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R5BM1W		11/09/2002	Sample	7439-96-5	T	Manganese	0.01	U	0.01	mg/l
R5BM1W		11/09/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	31	J	120	ug/l
R5BM1W		11/09/2002	Sample	93-65-2	T	MCPP	53	J	120	ug/l
R5BM1W		11/09/2002	Sample	7439-97-6	T	Mercury	0.0002	UJ	0.0002	mg/l
R5BM1W		11/09/2002	Sample	72-43-5	T	Methoxychlor	0.5	UJ	0.5	ug/l
R5BM1W		11/09/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R5BM1W		11/09/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R5BM1W		11/09/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R5BM1W		11/09/2002	Sample	3268-87-9	T	OCDD	4.1E-05	U	0.000041	ug/l
R5BM1W		11/09/2002	Sample	0	T	OCDF	1.3E-06	U	0.0000013	ug/l
R5BM1W		11/09/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R5BM1W		11/09/2002	Sample	106-47-8	T	P-Chloroaniline	2	J	20	ug/l
R5BM1W		11/09/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R5BM1W		11/09/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R5BM1W		11/09/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R5BM1W		11/09/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R5BM1W		11/09/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R5BM1W		11/09/2002	Sample	7440-22-4	T	Silver	0.00084	J	0.01	mg/l
R5BM1W		11/09/2002	Sample	7440-23-5	T	Sodium	19	J	80	mg/l
R5BM1W		11/09/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R5BM1W		11/09/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R5BM1W		11/09/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BM1W		11/09/2002	Sample	4	T	Total HpCDD	2.3E-06	U	0.0000023	ug/l
R5BM1W		11/09/2002	Sample	3	T	Total HpCDF	7.5E-07	U	7.5E-07	ug/l
R5BM1W		11/09/2002	Sample	8	T	Total HxCDD	1.1E-06	U	0.0000011	ug/l
R5BM1W		11/09/2002	Sample	1	T	Total HxCDF	9.9E-07	U	9.9E-07	ug/l
R5BM1W		11/09/2002	Sample	9	T	Total PeCDD	1.7E-06	U	0.0000017	ug/l
R5BM1W		11/09/2002	Sample	4	T	Total PeCDF	1.4E-06	U	0.0000014	ug/l
R5BM1W		11/09/2002	Sample	5	T	Total TCDD	6.9E-07	UJ	6.9E-07	ug/l
R5BM1W		11/09/2002	Sample	5	T	Total TCDF	1.1E-06	U	0.0000011	ug/l
R5BM1W		11/09/2002	Sample	8001-35-2	T	Toxaphene	5	UJ	5	ug/l
R5BM1W		11/09/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R5BM1W		11/09/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R5BM1W		11/09/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R5BM1W		11/09/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R5BM1W		11/09/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-36-0	D	Antimony	0.02	U	0.02	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-39-3	D	Barium	0.054		0.01	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-70-2	D	Calcium	52		0.5	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7439-89-6	D	Iron	0.04	J	0.05	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7439-95-4	D	Magnesium	21		0.5	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7439-96-5	D	Manganese	0.0014	J	0.01	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7439-97-6	D	Mercury	0.00012	J	0.0002	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-09-7	D	Potassium	3.4		0.01	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-23-5	D	Sodium	19	J	80	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R5BM1W-Filtered	R5BM1W	11/09/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R5CM1W		11/09/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R5CM1W		11/09/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R5CM1W		11/09/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R5CM1W		11/09/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R5CM1W		11/09/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R5CM1W		11/09/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R5CM1W		11/09/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R5CM1W		11/09/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R5CM1W		11/09/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R5CM1W		11/09/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R5CM1W		11/09/2002	Sample	72-54-8	T	4,4'-DDD	0.1	UJ	0.1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5CM1W		11/09/2002	Sample	72-55-9	T	4,4'-DDE	0.1	UJ	0.1	ug/l
R5CM1W		11/09/2002	Sample	50-29-3	T	4,4'-DDT	0.1	UJ	0.1	ug/l
R5CM1W		11/09/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R5CM1W		11/09/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R5CM1W		11/09/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R5CM1W		11/09/2002	Sample	309-00-2	T	Aldrin	0.05	UJ	0.05	ug/l
R5CM1W		11/09/2002	Sample	319-84-6	T	alpha-BHC	0.05	UJ	0.05	ug/l
R5CM1W		11/09/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	UJ	0.05	ug/l
R5CM1W		11/09/2002	Sample	7429-90-5	T	Aluminum	0.15	J	0.02	mg/l
R5CM1W		11/09/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R5CM1W		11/09/2002	Sample	7440-38-2	T	Arsenic	0.01	UJ	0.01	mg/l
R5CM1W		11/09/2002	Sample	7440-39-3	T	Barium	0.059		0.01	mg/l
R5CM1W		11/09/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R5CM1W		11/09/2002	Sample	319-85-7	T	beta-BHC	0.05	UJ	0.05	ug/l
R5CM1W		11/09/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R5CM1W		11/09/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R5CM1W		11/09/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R5CM1W		11/09/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R5CM1W		11/09/2002	Sample	108-90-7	T	Chlorobenzene	0.55	J	1	ug/l
R5CM1W		11/09/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R5CM1W		11/09/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R5CM1W		11/09/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R5CM1W		11/09/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R5CM1W		11/09/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R5CM1W		11/09/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R5CM1W		11/09/2002	Sample	319-86-8	T	delta-BHC	0.05	UJ	0.05	ug/l
R5CM1W		11/09/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R5CM1W		11/09/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R5CM1W		11/09/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R5CM1W		11/09/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R5CM1W		11/09/2002	Sample	60-57-1	T	Dieldrin	0.1	UJ	0.1	ug/l
R5CM1W		11/09/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	959-98-8	T	Endosulfan I	0.05	UJ	0.05	ug/l
R5CM1W		11/09/2002	Sample	9	T	Endosulfan II	0.1	UJ	0.1	ug/l
R5CM1W		11/09/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	UJ	0.1	ug/l
R5CM1W		11/09/2002	Sample	72-20-8	T	Endrin	0.1	UJ	0.1	ug/l
R5CM1W		11/09/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	UJ	0.1	ug/l
R5CM1W		11/09/2002	Sample	5	T	Endrin Ketone	0.1	UJ	0.1	ug/l
R5CM1W		11/09/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	UJ	0.05	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5CM1W		11/09/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	UJ	0.05	ug/l
R5CM1W		11/09/2002	Sample	E-11778	T	Hardness, Carbonate	48		200	Ca
R5CM1W		11/09/2002	Sample	76-44-8	T	Heptachlor	0.05	UJ	0.05	ug/l
R5CM1W		11/09/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	UJ	0.05	ug/l
R5CM1W		11/09/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R5CM1W		11/09/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R5CM1W		11/09/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	7439-89-6	T	Iron	0.45		0.05	mg/l
R5CM1W		11/09/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R5CM1W		11/09/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R5CM1W		11/09/2002	Sample	7439-96-5	T	Manganese	0.077		0.01	mg/l
R5CM1W		11/09/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R5CM1W		11/09/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R5CM1W		11/09/2002	Sample	7439-97-6	T	Mercury	0.00008	J	0.0002	mg/l
R5CM1W		11/09/2002	Sample	72-43-5	T	Methoxychlor	0.5	UJ	0.5	ug/l
R5CM1W		11/09/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R5CM1W		11/09/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R5CM1W		11/09/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R5CM1W		11/09/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R5CM1W		11/09/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R5CM1W		11/09/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R5CM1W		11/09/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R5CM1W		11/09/2002	Sample	7440-09-7	T	Potassium	3.4		0.01	mg/l
R5CM1W		11/09/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R5CM1W		11/09/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R5CM1W		11/09/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R5CM1W		11/09/2002	Sample	7440-23-5	T	Sodium	18	J	80	mg/l
R5CM1W		11/09/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R5CM1W		11/09/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R5CM1W		11/09/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	8001-35-2	T	Toxaphene	5	UJ	5	ug/l
R5CM1W		11/09/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R5CM1W		11/09/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R5CM1W		11/09/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R5CM1W		11/09/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R5CM1W		11/09/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-36-0	D	Antimony	0.02	U	0.02	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-39-3	D	Barium	0.053		0.01	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-70-2	D	Calcium	51		0.5	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7439-89-6	D	Iron	0.047	J	0.05	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7439-97-6	D	Mercury	0.0002	UJ	0.0002	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-09-7	D	Potassium	3.3		0.01	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-23-5	D	Sodium	18	J	80	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R5CM1W-Filtered	R5CM1W	11/09/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R5AD1W		11/07/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	107-06-2	T	1,2-Dichloroethane	0.13	J	1	ug/l
R5AD1W		11/07/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	UJ	2	ug/l
R5AD1W		11/07/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R5AD1W		11/07/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R5AD1W		11/07/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	94-75-7	T	2,4-D	1.3		0.5	ug/l
R5AD1W		11/07/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R5AD1W		11/07/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R5AD1W		11/07/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	UJ	10	ug/l
R5AD1W		11/07/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R5AD1W		11/07/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R5AD1W		11/07/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R5AD1W		11/07/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R5AD1W		11/07/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R5AD1W		11/07/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R5AD1W		11/07/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R5AD1W		11/07/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	UJ	10	ug/l
R5AD1W		11/07/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R5AD1W		11/07/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	67-64-1	T	Acetone	25	UJ	25	ug/l
R5AD1W		11/07/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R5AD1W		11/07/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R5AD1W		11/07/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R5AD1W		11/07/2002	Sample	7429-90-5	T	Aluminum	0.79		0.02	mg/l
R5AD1W		11/07/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R5AD1W		11/07/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R5AD1W		11/07/2002	Sample	7440-39-3	T	Barium	0.061		0.01	mg/l
R5AD1W		11/07/2002	Sample	71-43-2	T	Benzene	0.27	J	1	ug/l
R5AD1W		11/07/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R5AD1W		11/07/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R5AD1W		11/07/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	75-25-2	T	Bromoform	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	74-83-9	T	Bromomethane	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R5AD1W		11/07/2002	Sample	7440-70-2	T	Calcium	50		0.5	mg/l
R5AD1W		11/07/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l

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Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AD1W		11/07/2002	Sample	75-15-0	T	Carbon Disulfide	0.31	J	1	ug/l
R5AD1W		11/07/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	108-90-7	T	Chlorobenzene	1.3	J	1	ug/l
R5AD1W		11/07/2002	Sample	124-48-1	T	Chlorodibromomethane	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	75-00-3	T	Chloroethane	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	67-66-3	T	Chloroform	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	74-87-3	T	Chloromethane	0.4	J	0.5	ug/l
R5AD1W		11/07/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R5AD1W		11/07/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	5	T	cis-1,3-Dichloropropene	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R5AD1W		11/07/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R5AD1W		11/07/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R5AD1W		11/07/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R5AD1W		11/07/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R5AD1W		11/07/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R5AD1W		11/07/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R5AD1W		11/07/2002	Sample	75-09-2	T	Dichloromethane	5	UJ	5	ug/l
R5AD1W		11/07/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R5AD1W		11/07/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R5AD1W		11/07/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R5AD1W		11/07/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R5AD1W		11/07/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R5AD1W		11/07/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R5AD1W		11/07/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R5AD1W		11/07/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R5AD1W		11/07/2002	Sample	100-41-4	T	Ethylbenzene	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R5AD1W		11/07/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R5AD1W		11/07/2002	Sample	E-11778	T	Hardness, Carbonate	180		200	Ca
R5AD1W		11/07/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R5AD1W		11/07/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R5AD1W		11/07/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R5AD1W		11/07/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R5AD1W		11/07/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l
R5AD1W		11/07/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R5AD1W		11/07/2002	Sample	7439-95-4	T	Magnesium	19		0.5	mg/l
R5AD1W		11/07/2002	Sample	7439-96-5	T	Manganese	0.087		0.01	mg/l
R5AD1W		11/07/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R5AD1W		11/07/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R5AD1W		11/07/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R5AD1W		11/07/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R5AD1W		11/07/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	UJ	10	ug/l
R5AD1W		11/07/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R5AD1W		11/07/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R5AD1W		11/07/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R5AD1W		11/07/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R5AD1W		11/07/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R5AD1W		11/07/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R5AD1W		11/07/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R5AD1W		11/07/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R5AD1W		11/07/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R5AD1W		11/07/2002	Sample	7440-09-7	T	Potassium	3.6		0.01	mg/l
R5AD1W		11/07/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AD1W		11/07/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R5AD1W		11/07/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R5AD1W		11/07/2002	Sample	7440-23-5	T	Sodium	19		80	mg/l
R5AD1W		11/07/2002	Sample	100-42-5	T	Styrene (Monomer)	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R5AD1W		11/07/2002	Sample	127-18-4	T	Tetrachloroethene	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R5AD1W		11/07/2002	Sample	108-88-3	T	Toluene	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R5AD1W		11/07/2002	Sample	6	T	trans-1,3-Dichloropropene	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R5AD1W		11/07/2002	Sample	79-01-6	T	Trichloroethylene	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R5AD1W		11/07/2002	Sample	75-01-4	T	Vinyl chloride	1	UJ	1	ug/l
R5AD1W		11/07/2002	Sample	1330-20-7	T	Xylenes, Total	2	UJ	2	ug/l
R5AD1W		11/07/2002	Sample	7440-66-6	T	Zinc	0.0059	J	0.02	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-39-3	D	Barium	0.051		0.01	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-70-2	D	Calcium	49		0.5	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7439-89-6	D	Iron	0.058		0.05	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7439-95-4	D	Magnesium	19		0.5	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7439-97-6	D	Mercury	9.4E-05	J	0.0002	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-09-7	D	Potassium	3.4		0.01	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-23-5	D	Sodium	19		80	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R5AD1W-Filtered	R5AD1W	11/07/2002	Sample	7440-66-6	D	Zinc	0.0049	J	0.02	mg/l
R5BD1W		11/08/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	UJ	1	ug/l
R5BD1W		11/08/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R5BD1W		11/08/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R5BD1W		11/08/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R5BD1W		11/08/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	94-75-7	T	2,4-D	0.72		0.5	ug/l
R5BD1W		11/08/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R5BD1W		11/08/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R5BD1W		11/08/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R5BD1W		11/08/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R5BD1W		11/08/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R5BD1W		11/08/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BD1W		11/08/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R5BD1W		11/08/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R5BD1W		11/08/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R5BD1W		11/08/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R5BD1W		11/08/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R5BD1W		11/08/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R5BD1W		11/08/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R5BD1W		11/08/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R5BD1W		11/08/2002	Sample	7429-90-5	T	Aluminum	0.46	J	0.02	mg/l
R5BD1W		11/08/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R5BD1W		11/08/2002	Sample	7440-38-2	T	Arsenic	0.01	UJ	0.01	mg/l
R5BD1W		11/08/2002	Sample	7440-39-3	T	Barium	0.061		0.01	mg/l
R5BD1W		11/08/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R5BD1W		11/08/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R5BD1W		11/08/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	75-27-4	T	Bromodichloromethane	1	UJ	1	ug/l
R5BD1W		11/08/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R5BD1W		11/08/2002	Sample	7440-70-2	T	Calcium	52		0.5	mg/l
R5BD1W		11/08/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	UJ	1	ug/l
R5BD1W		11/08/2002	Sample	108-90-7	T	Chlorobenzene	0.88	J	1	ug/l
R5BD1W		11/08/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	74-87-3	T	Chloromethane	1	UJ	1	ug/l
R5BD1W		11/08/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R5BD1W		11/08/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R5BD1W		11/08/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R5BD1W		11/08/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R5BD1W		11/08/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R5BD1W		11/08/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R5BD1W		11/08/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R5BD1W		11/08/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R5BD1W		11/08/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R5BD1W		11/08/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R5BD1W		11/08/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R5BD1W		11/08/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R5BD1W		11/08/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R5BD1W		11/08/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R5BD1W		11/08/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R5BD1W		11/08/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	UJ	0.1	ug/l
R5BD1W		11/08/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R5BD1W		11/08/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BD1W		11/08/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R5BD1W		11/08/2002	Sample	E-11778	T	Hardness, Carbonate	1100		200	Ca
R5BD1W		11/08/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R5BD1W		11/08/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R5BD1W		11/08/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R5BD1W		11/08/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R5BD1W		11/08/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	7439-89-6	T	Iron	0.73		0.05	mg/l
R5BD1W		11/08/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R5BD1W		11/08/2002	Sample	7439-95-4	T	Magnesium	21		0.5	mg/l
R5BD1W		11/08/2002	Sample	7439-96-5	T	Manganese	0.082		0.01	mg/l
R5BD1W		11/08/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R5BD1W		11/08/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R5BD1W		11/08/2002	Sample	7439-97-6	T	Mercury	0.0002	J	0.0002	mg/l
R5BD1W		11/08/2002	Sample	72-43-5	T	Methoxychlor	0.5	UJ	0.5	ug/l
R5BD1W		11/08/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R5BD1W		11/08/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R5BD1W		11/08/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R5BD1W		11/08/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R5BD1W		11/08/2002	Sample	106-47-8	T	P-Chloroaniline	1.2	J	20	ug/l
R5BD1W		11/08/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R5BD1W		11/08/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R5BD1W		11/08/2002	Sample	7440-09-7	T	Potassium	3.6		0.01	mg/l
R5BD1W		11/08/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R5BD1W		11/08/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R5BD1W		11/08/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R5BD1W		11/08/2002	Sample	7440-23-5	T	Sodium	21	J	80	mg/l
R5BD1W		11/08/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R5BD1W		11/08/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R5BD1W		11/08/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R5BD1W		11/08/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R5BD1W		11/08/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R5BD1W		11/08/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R5BD1W		11/08/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R5BD1W		11/08/2002	Sample	7440-66-6	T	Zinc	0.02	U	0.02	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-36-0	D	Antimony	0.02	U	0.02	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-38-2	D	Arsenic	0.01	UJ	0.01	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-39-3	D	Barium	0.054		0.01	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-70-2	D	Calcium	52		0.5	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7439-89-6	D	Iron	0.049	J	0.05	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7439-95-4	D	Magnesium	21		0.5	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7439-97-6	D	Mercury	0.0002	UJ	0.0002	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-09-7	D	Potassium	3.5		0.01	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-23-5	D	Sodium	21	J	80	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R5BD1W-Filtered	R5BD1W	11/08/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R6AU1W		11/06/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R6AU1W		11/06/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R6AU1W		11/06/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R6AU1W		11/06/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	94-75-7	T	2,4-D	0.93		0.5	ug/l
R6AU1W		11/06/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R6AU1W		11/06/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R6AU1W		11/06/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R6AU1W		11/06/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R6AU1W		11/06/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R6AU1W		11/06/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R6AU1W		11/06/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R6AU1W		11/06/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R6AU1W		11/06/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R6AU1W		11/06/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R6AU1W		11/06/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R6AU1W		11/06/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R6AU1W		11/06/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R6AU1W		11/06/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R6AU1W		11/06/2002	Sample	7429-90-5	T	Aluminum	1.1		0.02	mg/l
R6AU1W		11/06/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	7440-36-0	T	Antimony	0.0051	J	0.02	mg/l
R6AU1W		11/06/2002	Sample	7440-38-2	T	Arsenic	0.0053	J	0.01	mg/l
R6AU1W		11/06/2002	Sample	7440-39-3	T	Barium	0.061		0.01	mg/l
R6AU1W		11/06/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R6AU1W		11/06/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R6AU1W		11/06/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R6AU1W		11/06/2002	Sample	7440-70-2	T	Calcium	47		0.5	mg/l
R6AU1W		11/06/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AU1W		11/06/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	108-90-7	T	Chlorobenzene	1.1		1	ug/l
R6AU1W		11/06/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	74-87-3	T	Chloromethane	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R6AU1W		11/06/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R6AU1W		11/06/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R6AU1W		11/06/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R6AU1W		11/06/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R6AU1W		11/06/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R6AU1W		11/06/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R6AU1W		11/06/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R6AU1W		11/06/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R6AU1W		11/06/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R6AU1W		11/06/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R6AU1W		11/06/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R6AU1W		11/06/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R6AU1W		11/06/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R6AU1W		11/06/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R6AU1W		11/06/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R6AU1W		11/06/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R6AU1W		11/06/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R6AU1W		11/06/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R6AU1W		11/06/2002	Sample	E-11778	T	Hardness, Carbonate	200		200	Ca
R6AU1W		11/06/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R6AU1W		11/06/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R6AU1W		11/06/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R6AU1W		11/06/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R6AU1W		11/06/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	7439-89-6	T	Iron	1.4		0.05	mg/l
R6AU1W		11/06/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R6AU1W		11/06/2002	Sample	7439-95-4	T	Magnesium	19		0.5	mg/l
R6AU1W		11/06/2002	Sample	7439-96-5	T	Manganese	0.093		0.01	mg/l
R6AU1W		11/06/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R6AU1W		11/06/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R6AU1W		11/06/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R6AU1W		11/06/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R6AU1W		11/06/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R6AU1W		11/06/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R6AU1W		11/06/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R6AU1W		11/06/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R6AU1W		11/06/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R6AU1W		11/06/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R6AU1W		11/06/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R6AU1W		11/06/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R6AU1W		11/06/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R6AU1W		11/06/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AU1W		11/06/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R6AU1W		11/06/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R6AU1W		11/06/2002	Sample	7440-23-5	T	Sodium	19		80	mg/l
R6AU1W		11/06/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R6AU1W		11/06/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R6AU1W		11/06/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R6AU1W		11/06/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R6AU1W		11/06/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R6AU1W		11/06/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R6AU1W		11/06/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R6AU1W		11/06/2002	Sample	7440-66-6	T	Zinc	0.0066	J	0.02	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-36-0	D	Antimony	0.02	U	0.02	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-39-3	D	Barium	0.05		0.01	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-70-2	D	Calcium	47		0.5	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7439-89-6	D	Iron	0.077		0.05	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7439-95-4	D	Magnesium	19		0.5	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-09-7	D	Potassium	3.4		0.01	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-23-5	D	Sodium	19		80	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R6AU1W-Filtered	R6AU1W	11/06/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R6BU1W		11/06/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R6BU1W		11/06/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R6BU1W		11/06/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R6BU1W		11/06/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	94-75-7	T	2,4-D	0.88		0.5	ug/l
R6BU1W		11/06/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R6BU1W		11/06/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R6BU1W		11/06/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R6BU1W		11/06/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R6BU1W		11/06/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R6BU1W		11/06/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6BU1W		11/06/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R6BU1W		11/06/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R6BU1W		11/06/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R6BU1W		11/06/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R6BU1W		11/06/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R6BU1W		11/06/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R6BU1W		11/06/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R6BU1W		11/06/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R6BU1W		11/06/2002	Sample	7429-90-5	T	Aluminum	0.74		0.02	mg/l
R6BU1W		11/06/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R6BU1W		11/06/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R6BU1W		11/06/2002	Sample	7440-39-3	T	Barium	0.06		0.01	mg/l
R6BU1W		11/06/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R6BU1W		11/06/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R6BU1W		11/06/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R6BU1W		11/06/2002	Sample	7440-70-2	T	Calcium	48		0.5	mg/l
R6BU1W		11/06/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	108-90-7	T	Chlorobenzene	1.2		1	ug/l
R6BU1W		11/06/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	74-87-3	T	Chloromethane	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R6BU1W		11/06/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R6BU1W		11/06/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R6BU1W		11/06/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R6BU1W		11/06/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R6BU1W		11/06/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R6BU1W		11/06/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R6BU1W		11/06/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R6BU1W		11/06/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R6BU1W		11/06/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R6BU1W		11/06/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R6BU1W		11/06/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R6BU1W		11/06/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R6BU1W		11/06/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R6BU1W		11/06/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R6BU1W		11/06/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R6BU1W		11/06/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R6BU1W		11/06/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6BU1W		11/06/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R6BU1W		11/06/2002	Sample	E-11778	T	Hardness, Carbonate	220		200	Ca
R6BU1W		11/06/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R6BU1W		11/06/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R6BU1W		11/06/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R6BU1W		11/06/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R6BU1W		11/06/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	7439-89-6	T	Iron	1		0.05	mg/l
R6BU1W		11/06/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R6BU1W		11/06/2002	Sample	7439-95-4	T	Magnesium	19		0.5	mg/l
R6BU1W		11/06/2002	Sample	7439-96-5	T	Manganese	0.083		0.01	mg/l
R6BU1W		11/06/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R6BU1W		11/06/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R6BU1W		11/06/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R6BU1W		11/06/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R6BU1W		11/06/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R6BU1W		11/06/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R6BU1W		11/06/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R6BU1W		11/06/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R6BU1W		11/06/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R6BU1W		11/06/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R6BU1W		11/06/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	108-95-2	T	Phenol	1	J	10	ug/l
R6BU1W		11/06/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R6BU1W		11/06/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R6BU1W		11/06/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R6BU1W		11/06/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R6BU1W		11/06/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R6BU1W		11/06/2002	Sample	7440-23-5	T	Sodium	19		80	mg/l
R6BU1W		11/06/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R6BU1W		11/06/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R6BU1W		11/06/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R6BU1W		11/06/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R6BU1W		11/06/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R6BU1W		11/06/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R6BU1W		11/06/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R6BU1W		11/06/2002	Sample	7440-66-6	T	Zinc	0.0049	J	0.02	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-36-0	D	Antimony	0.02	U	0.02	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-39-3	D	Barium	0.051		0.01	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-70-2	D	Calcium	48		0.5	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7439-89-6	D	Iron	0.087		0.05	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7439-95-4	D	Magnesium	19		0.5	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-09-7	D	Potassium	3.4		0.01	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-23-5	D	Sodium	19		80	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R6BU1W-Filtered	R6BU1W	11/06/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R6AM1W		11/07/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R6AM1W		11/07/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R6AM1W		11/07/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R6AM1W		11/07/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	94-75-7	T	2,4-D	1		0.5	ug/l
R6AM1W		11/07/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R6AM1W		11/07/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R6AM1W		11/07/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R6AM1W		11/07/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R6AM1W		11/07/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R6AM1W		11/07/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R6AM1W		11/07/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R6AM1W		11/07/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R6AM1W		11/07/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R6AM1W		11/07/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R6AM1W		11/07/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R6AM1W		11/07/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R6AM1W		11/07/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R6AM1W		11/07/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R6AM1W		11/07/2002	Sample	7429-90-5	T	Aluminum	0.81		0.02	mg/l
R6AM1W		11/07/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R6AM1W		11/07/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R6AM1W		11/07/2002	Sample	7440-39-3	T	Barium	0.061		0.01	mg/l
R6AM1W		11/07/2002	Sample	71-43-2	T	Benzene	0.35	J	1	ug/l
R6AM1W		11/07/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R6AM1W		11/07/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R6AM1W		11/07/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R6AM1W		11/07/2002	Sample	7440-70-2	T	Calcium	49		0.5	mg/l
R6AM1W		11/07/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM1W		11/07/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	108-90-7	T	Chlorobenzene	2.3		1	ug/l
R6AM1W		11/07/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	74-87-3	T	Chloromethane	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R6AM1W		11/07/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	7440-48-4	T	Cobalt	0.0012	J	0.01	mg/l
R6AM1W		11/07/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R6AM1W		11/07/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R6AM1W		11/07/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R6AM1W		11/07/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R6AM1W		11/07/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R6AM1W		11/07/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R6AM1W		11/07/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R6AM1W		11/07/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R6AM1W		11/07/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R6AM1W		11/07/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R6AM1W		11/07/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R6AM1W		11/07/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R6AM1W		11/07/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R6AM1W		11/07/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R6AM1W		11/07/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R6AM1W		11/07/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R6AM1W		11/07/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R6AM1W		11/07/2002	Sample	E-11778	T	Hardness, Carbonate	190		200	Ca
R6AM1W		11/07/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R6AM1W		11/07/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R6AM1W		11/07/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R6AM1W		11/07/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R6AM1W		11/07/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l
R6AM1W		11/07/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R6AM1W		11/07/2002	Sample	7439-95-4	T	Magnesium	19		0.5	mg/l
R6AM1W		11/07/2002	Sample	7439-96-5	T	Manganese	0.085		0.01	mg/l
R6AM1W		11/07/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R6AM1W		11/07/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R6AM1W		11/07/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R6AM1W		11/07/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R6AM1W		11/07/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R6AM1W		11/07/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R6AM1W		11/07/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R6AM1W		11/07/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R6AM1W		11/07/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R6AM1W		11/07/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R6AM1W		11/07/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R6AM1W		11/07/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R6AM1W		11/07/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R6AM1W		11/07/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM1W		11/07/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R6AM1W		11/07/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R6AM1W		11/07/2002	Sample	7440-23-5	T	Sodium	18		80	mg/l
R6AM1W		11/07/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R6AM1W		11/07/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R6AM1W		11/07/2002	Sample	108-88-3	T	Toluene	0.45	J	1	ug/l
R6AM1W		11/07/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R6AM1W		11/07/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R6AM1W		11/07/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R6AM1W		11/07/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R6AM1W		11/07/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R6AM1W		11/07/2002	Sample	7440-66-6	T	Zinc	0.0049	J	0.02	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-39-3	D	Barium	0.052		0.01	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-70-2	D	Calcium	49		0.5	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7439-89-6	D	Iron	0.063		0.05	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7439-95-4	D	Magnesium	19		0.5	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-09-7	D	Potassium	3.4		0.01	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-23-5	D	Sodium	18		80	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R6AM1W-Filtered	R6AM1W	11/07/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	94-75-7	T	2,4-D	0.94		0.5	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM2W	R6AM1W	11/07/2002	Duplicate	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	83-32-9	T	Acenaphthene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	67-64-1	T	Acetone	25	U	25	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7429-90-5	T	Aluminum	0.75	U	0.75	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	120-12-7	T	Anthracene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-39-3	T	Barium	0.061		0.01	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	71-43-2	T	Benzene	0.21	J	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	75-27-4	T	Bromodichloromethane	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	75-25-2	T	Bromoform	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	74-83-9	T	Bromomethane	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-70-2	T	Calcium	49		0.5	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	86-74-8	T	Carbazole	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	108-90-7	T	Chlorobenzene	1.5		1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	75-00-3	T	Chloroethane	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	67-66-3	T	Chloroform	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	74-87-3	T	Chloromethane	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	218-01-9	T	Chrysene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	75-99-0	T	Dalapon	120	U	120	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	75-09-2	T	Dichloromethane	5	U	5	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	120-36-5	T	Dichlorprop	6	U	6	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	88-85-7	T	Dinoseb	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	9	T	Endosulfan II	0.1	U	0.1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	206-44-0	T	Fluoranthene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	86-73-7	T	Fluorene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM2W	R6AM1W	11/07/2002	Duplicate	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	E-11778	T	Hardness, Carbonate	210		200	Ca
R6AM2W	R6AM1W	11/07/2002	Duplicate	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7439-89-6	T	Iron	1		0.05	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	78-59-1	T	Isophorone	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7439-95-4	T	Magnesium	19		0.5	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7439-96-5	T	Manganese	0.084		0.01	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	93-65-2	T	MCPP	120	U	120	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	91-20-3	T	Naphthalene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	85-01-8	T	Phenanthrene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	108-95-2	T	Phenol	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-09-7	T	Potassium	3.5		0.01	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	129-00-0	T	Pyrene	10	U	10	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-23-5	T	Sodium	18		80	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	108-88-3	T	Toluene	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	8001-35-2	T	Toxaphene	5	U	5	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R6AM2W	R6AM1W	11/07/2002	Duplicate	7440-66-6	T	Zinc	0.005	J	0.02	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-39-3	D	Barium	0.053		0.01	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-70-2	D	Calcium	50		0.5	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7439-89-6	D	Iron	0.058		0.05	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7439-95-4	D	Magnesium	20		0.5	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-09-7	D	Potassium	3.5		0.01	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-23-5	D	Sodium	18		80	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R6AM2W-Filtered	R6AM2W	11/07/2002	Duplicate	7440-66-6	D	Zinc	0.0057	J	0.02	mg/l
R6BM1W		11/07/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	2.6E-06	U	0.0000026	ug/l
R6BM1W		11/07/2002	Sample	4	T	1,2,3,4,6,7,8-HpCDF	8.3E-07	U	8.3E-07	ug/l
R6BM1W		11/07/2002	Sample	7	T	1,2,3,4,7,8,9-HpCDF	7.3E-07	U	7.3E-07	ug/l
R6BM1W		11/07/2002	Sample	6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	1.3E-06	U	0.0000013	ug/l
R6BM1W		11/07/2002	Sample	9	T	1,2,3,4,7,8-HxCDF	8.6E-07	U	8.6E-07	ug/l
R6BM1W		11/07/2002	Sample	7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	1.2E-06	U	0.0000012	ug/l
R6BM1W		11/07/2002	Sample	9	T	1,2,3,6,7,8-HxCDF	7.8E-07	U	7.8E-07	ug/l
R6BM1W		11/07/2002	Sample	3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	1.2E-06	U	0.0000012	ug/l
R6BM1W		11/07/2002	Sample	9	T	1,2,3,7,8,9-HxCDF	9.7E-07	U	9.7E-07	ug/l
R6BM1W		11/07/2002	Sample	6	T	1,2,3,7,8-Pentachlorodibenzofuran	9E-07	U	0.0000009	ug/l
R6BM1W		11/07/2002	Sample	4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	1.9E-06	U	0.0000019	ug/l
R6BM1W		11/07/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R6BM1W		11/07/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	5	T	2,3,4,6,7,8-HxCDF	8.8E-07	U	8.8E-07	ug/l
R6BM1W		11/07/2002	Sample	4	T	2,3,4,7,8-PeCDF	8.6E-07	U	8.6E-07	ug/l
R6BM1W		11/07/2002	Sample	1746-01-6	T	2,3,7,8-TCDD	7.6E-07	UJ	7.6E-07	ug/l
R6BM1W		11/07/2002	Sample	9	T	2,3,7,8-Tetrachlorodibenzofuran	1.2E-06	U	0.0000012	ug/l
R6BM1W		11/07/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R6BM1W		11/07/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R6BM1W		11/07/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	94-75-7	T	2,4-D	0.98		0.5	ug/l
R6BM1W		11/07/2002	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/l
R6BM1W		11/07/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R6BM1W		11/07/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R6BM1W		11/07/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R6BM1W		11/07/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R6BM1W		11/07/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R6BM1W		11/07/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R6BM1W		11/07/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R6BM1W		11/07/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R6BM1W		11/07/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R6BM1W		11/07/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R6BM1W		11/07/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R6BM1W		11/07/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R6BM1W		11/07/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R6BM1W		11/07/2002	Sample	7429-90-5	T	Aluminum	0.82		0.02	mg/l
R6BM1W		11/07/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R6BM1W		11/07/2002	Sample	7440-38-2	T	Arsenic	0.0031	J	0.01	mg/l
R6BM1W		11/07/2002	Sample	7440-39-3	T	Barium	0.063		0.01	mg/l
R6BM1W		11/07/2002	Sample	71-43-2	T	Benzene	0.19	J	1	ug/l
R6BM1W		11/07/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6BM1W		11/07/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R6BM1W		11/07/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R6BM1W		11/07/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R6BM1W		11/07/2002	Sample	7440-70-2	T	Calcium	51		0.5	mg/l
R6BM1W		11/07/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	108-90-7	T	Chlorobenzene	1.3		1	ug/l
R6BM1W		11/07/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	74-87-3	T	Chloromethane	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R6BM1W		11/07/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	7440-48-4	T	Cobalt	0.001	J	0.01	mg/l
R6BM1W		11/07/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l
R6BM1W		11/07/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R6BM1W		11/07/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R6BM1W		11/07/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R6BM1W		11/07/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R6BM1W		11/07/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R6BM1W		11/07/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R6BM1W		11/07/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R6BM1W		11/07/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R6BM1W		11/07/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R6BM1W		11/07/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R6BM1W		11/07/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R6BM1W		11/07/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R6BM1W		11/07/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R6BM1W		11/07/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R6BM1W		11/07/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R6BM1W		11/07/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R6BM1W		11/07/2002	Sample	E-11778	T	Hardness, Carbonate	200		200	Ca
R6BM1W		11/07/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R6BM1W		11/07/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R6BM1W		11/07/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R6BM1W		11/07/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R6BM1W		11/07/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l
R6BM1W		11/07/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R6BM1W		11/07/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R6BM1W		11/07/2002	Sample	7439-96-5	T	Manganese	0.085		0.01	mg/l
R6BM1W		11/07/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R6BM1W		11/07/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R6BM1W		11/07/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R6BM1W		11/07/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R6BM1W		11/07/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6BM1W		11/07/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R6BM1W		11/07/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R6BM1W		11/07/2002	Sample	3268-87-9	T	OCDD	4.4E-05	U	0.000044	ug/l
R6BM1W		11/07/2002	Sample	0	T	OCDF	1.6E-06	U	0.0000016	ug/l
R6BM1W		11/07/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R6BM1W		11/07/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R6BM1W		11/07/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R6BM1W		11/07/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R6BM1W		11/07/2002	Sample	7440-09-7	T	Potassium	3.7		0.01	mg/l
R6BM1W		11/07/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R6BM1W		11/07/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R6BM1W		11/07/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R6BM1W		11/07/2002	Sample	7440-23-5	T	Sodium	19		80	mg/l
R6BM1W		11/07/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R6BM1W		11/07/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R6BM1W		11/07/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	4	T	Total HpCDD	2.6E-06	U	0.0000026	ug/l
R6BM1W		11/07/2002	Sample	3	T	Total HpCDF	8.3E-07	U	8.3E-07	ug/l
R6BM1W		11/07/2002	Sample	8	T	Total HxCDD	1.3E-06	U	0.0000013	ug/l
R6BM1W		11/07/2002	Sample	1	T	Total HxCDF	9.7E-07	U	9.7E-07	ug/l
R6BM1W		11/07/2002	Sample	9	T	Total PeCDD	2.1E-06	U	0.0000021	ug/l
R6BM1W		11/07/2002	Sample	4	T	Total PeCDF	1.5E-06	U	0.0000015	ug/l
R6BM1W		11/07/2002	Sample	5	T	Total TCDD	7.6E-07	UJ	7.6E-07	ug/l
R6BM1W		11/07/2002	Sample	5	T	Total TCDF	1.2E-06	U	0.0000012	ug/l
R6BM1W		11/07/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R6BM1W		11/07/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R6BM1W		11/07/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R6BM1W		11/07/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R6BM1W		11/07/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R6BM1W		11/07/2002	Sample	7440-66-6	T	Zinc	0.005	J	0.02	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-39-3	D	Barium	0.053		0.01	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-70-2	D	Calcium	50		0.5	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7439-89-6	D	Iron	0.053		0.05	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7439-95-4	D	Magnesium	20		0.5	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-09-7	D	Potassium	3.5		0.01	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-23-5	D	Sodium	19		80	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R6BM1W-Filtered	R6BM1W	11/07/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R6CM1W		11/07/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R6CM1W		11/07/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6CM1W		11/07/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R6CM1W		11/07/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R6CM1W		11/07/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/l
R6CM1W		11/07/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R6CM1W		11/07/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R6CM1W		11/07/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R6CM1W		11/07/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R6CM1W		11/07/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R6CM1W		11/07/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R6CM1W		11/07/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R6CM1W		11/07/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R6CM1W		11/07/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R6CM1W		11/07/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R6CM1W		11/07/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R6CM1W		11/07/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l
R6CM1W		11/07/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R6CM1W		11/07/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R6CM1W		11/07/2002	Sample	7429-90-5	T	Aluminum	0.87		0.02	mg/l
R6CM1W		11/07/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	7440-36-0	T	Antimony	0.02	UJ	0.02	mg/l
R6CM1W		11/07/2002	Sample	7440-38-2	T	Arsenic	0.0033	J	0.01	mg/l
R6CM1W		11/07/2002	Sample	7440-39-3	T	Barium	0.062		0.01	mg/l
R6CM1W		11/07/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R6CM1W		11/07/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R6CM1W		11/07/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	1.7	J	10	ug/l
R6CM1W		11/07/2002	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R6CM1W		11/07/2002	Sample	7440-70-2	T	Calcium	50		0.5	mg/l
R6CM1W		11/07/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	74-87-3	T	Chloromethane	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R6CM1W		11/07/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/l
R6CM1W		11/07/2002	Sample	7440-50-8	T	Copper	0.02	U	0.02	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6CM1W		11/07/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R6CM1W		11/07/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R6CM1W		11/07/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R6CM1W		11/07/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R6CM1W		11/07/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R6CM1W		11/07/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R6CM1W		11/07/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R6CM1W		11/07/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R6CM1W		11/07/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R6CM1W		11/07/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R6CM1W		11/07/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R6CM1W		11/07/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R6CM1W		11/07/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R6CM1W		11/07/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R6CM1W		11/07/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R6CM1W		11/07/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R6CM1W		11/07/2002	Sample	E-11778	T	Hardness, Carbonate	190		200	Ca
R6CM1W		11/07/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R6CM1W		11/07/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R6CM1W		11/07/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R6CM1W		11/07/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R6CM1W		11/07/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l
R6CM1W		11/07/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R6CM1W		11/07/2002	Sample	7439-95-4	T	Magnesium	20		0.5	mg/l
R6CM1W		11/07/2002	Sample	7439-96-5	T	Manganese	0.082		0.01	mg/l
R6CM1W		11/07/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R6CM1W		11/07/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R6CM1W		11/07/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R6CM1W		11/07/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R6CM1W		11/07/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R6CM1W		11/07/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R6CM1W		11/07/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R6CM1W		11/07/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R6CM1W		11/07/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R6CM1W		11/07/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R6CM1W		11/07/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R6CM1W		11/07/2002	Sample	7440-09-7	T	Potassium	3.6		0.01	mg/l
R6CM1W		11/07/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R6CM1W		11/07/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R6CM1W		11/07/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R6CM1W		11/07/2002	Sample	7440-23-5	T	Sodium	19		80	mg/l
R6CM1W		11/07/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R6CM1W		11/07/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	7440-28-0	T	Thallium	0.01	UJ	0.01	mg/l
R6CM1W		11/07/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R6CM1W		11/07/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R6CM1W		11/07/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6CM1W		11/07/2002	Sample	7440-62-2	T	Vanadium	0.01	U	0.01	mg/l
R6CM1W		11/07/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R6CM1W		11/07/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R6CM1W		11/07/2002	Sample	7440-66-6	T	Zinc	0.0053	J	0.02	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7429-90-5	D	Aluminum	0.2	U	0.2	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-36-0	D	Antimony	0.02	UJ	0.02	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-39-3	D	Barium	0.051		0.01	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-70-2	D	Calcium	49		0.5	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7439-89-6	D	Iron	0.051		0.05	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7439-95-4	D	Magnesium	19		0.5	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-09-7	D	Potassium	3.4		0.01	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-23-5	D	Sodium	19		80	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-28-0	D	Thallium	0.01	UJ	0.01	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-62-2	D	Vanadium	0.01	U	0.01	mg/l
R6CM1W-Filtered	R6CM1W	11/07/2002	Sample	7440-66-6	D	Zinc	0.02	U	0.02	mg/l
R6AD1W		11/06/2002	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	120-82-1	T	1,2,4-Trichlorobenzene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	95-50-1	T	1,2-Dichlorobenzene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/l
R6AD1W		11/06/2002	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	541-73-1	T	1,3-Dichlorobenzene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	106-46-7	T	1,4-Dichlorobenzene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/l
R6AD1W		11/06/2002	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
R6AD1W		11/06/2002	Sample	95-95-4	T	2,4,5-Trichlorophenol	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	88-06-2	T	2,4,6-Trichlorophenol	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	94-75-7	T	2,4-D	0.71		0.5	ug/l
R6AD1W		11/06/2002	Sample	94-82-6	T	2,4-DB	0.5	UJ	0.5	ug/l
R6AD1W		11/06/2002	Sample	120-83-2	T	2,4-Dichlorophenol	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	105-67-9	T	2,4-Dimethylphenol	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	51-28-5	T	2,4-Dinitrophenol	50	U	50	ug/l
R6AD1W		11/06/2002	Sample	121-14-2	T	2,4-Dinitrotoluene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	606-20-2	T	2,6-Dinitrotoluene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	91-58-7	T	2-Chloronaphthalene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	95-57-8	T	2-Chlorophenol	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	91-57-6	T	2-Methylnaphthalene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	88-74-4	T	2-Nitroaniline	50	U	50	ug/l
R6AD1W		11/06/2002	Sample	88-75-5	T	2-Nitrophenol	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	91-94-1	T	3,3'-Dichlorobenzidine	20	U	20	ug/l
R6AD1W		11/06/2002	Sample	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	99-09-2	T	3-Nitroaniline	50	U	50	ug/l
R6AD1W		11/06/2002	Sample	72-54-8	T	4,4'-DDD	0.1	U	0.1	ug/l
R6AD1W		11/06/2002	Sample	72-55-9	T	4,4'-DDE	0.1	U	0.1	ug/l
R6AD1W		11/06/2002	Sample	50-29-3	T	4,4'-DDT	0.1	U	0.1	ug/l
R6AD1W		11/06/2002	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	50	U	50	ug/l
R6AD1W		11/06/2002	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	59-50-7	T	4-Chloro-3-methylphenol	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	100-02-7	T	4-Nitrophenol	50	U	50	ug/l
R6AD1W		11/06/2002	Sample	83-32-9	T	Acenaphthene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	208-96-8	T	Acenaphthylene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	67-64-1	T	Acetone	25	U	25	ug/l
R6AD1W		11/06/2002	Sample	309-00-2	T	Aldrin	0.05	U	0.05	ug/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AD1W		11/06/2002	Sample	319-84-6	T	alpha-BHC	0.05	U	0.05	ug/l
R6AD1W		11/06/2002	Sample	5103-71-9	T	alpha-Chlordane	0.05	U	0.05	ug/l
R6AD1W		11/06/2002	Sample	7429-90-5	T	Aluminum	0.96		0.02	mg/l
R6AD1W		11/06/2002	Sample	120-12-7	T	Anthracene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/l
R6AD1W		11/06/2002	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/l
R6AD1W		11/06/2002	Sample	7440-39-3	T	Barium	0.06		0.01	mg/l
R6AD1W		11/06/2002	Sample	71-43-2	T	Benzene	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	56-55-3	T	Benzo(a)anthracene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	50-32-8	T	Benzo(a)pyrene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	205-99-2	T	Benzo(b)fluoranthene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	191-24-2	T	Benzo(g,h,i)perylene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	207-08-9	T	Benzo(k)fluoranthene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	85-68-7	T	Benzyl Butyl Phthalate	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/l
R6AD1W		11/06/2002	Sample	319-85-7	T	beta-BHC	0.05	U	0.05	ug/l
R6AD1W		11/06/2002	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	111-44-4	T	bis(2-Chloroethyl)ether	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	75-25-2	T	Bromoform	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	74-83-9	T	Bromomethane	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/l
R6AD1W		11/06/2002	Sample	7440-70-2	T	Calcium	46		0.5	mg/l
R6AD1W		11/06/2002	Sample	86-74-8	T	Carbazole	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	75-00-3	T	Chloroethane	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	67-66-3	T	Chloroform	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	74-87-3	T	Chloromethane	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	7440-47-3	T	Chromium	0.01	U	0.01	mg/l
R6AD1W		11/06/2002	Sample	218-01-9	T	Chrysene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	7440-48-4	T	Cobalt	0.00076	J	0.01	mg/l
R6AD1W		11/06/2002	Sample	7440-50-8	T	Copper	0.0025	J	0.01	mg/l
R6AD1W		11/06/2002	Sample	75-99-0	T	Dalapon	120	U	120	ug/l
R6AD1W		11/06/2002	Sample	2051-24-3	T	Decachlorobiphenyl	0.5	U	0.5	ug/l
R6AD1W		11/06/2002	Sample	319-86-8	T	delta-BHC	0.05	U	0.05	ug/l
R6AD1W		11/06/2002	Sample	53-70-3	T	Dibenzo(a,h)anthracene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	132-64-9	T	Dibenzofuran	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	1918-00-9	T	Dicamba	1.2	U	1.2	ug/l
R6AD1W		11/06/2002	Sample	DICHLOR	T	Dichlorobiphenyl	0.1	U	0.1	ug/l
R6AD1W		11/06/2002	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/l
R6AD1W		11/06/2002	Sample	120-36-5	T	Dichlorprop	6	U	6	ug/l
R6AD1W		11/06/2002	Sample	60-57-1	T	Dieldrin	0.1	U	0.1	ug/l
R6AD1W		11/06/2002	Sample	84-66-2	T	Diethyl Phthalate	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	131-11-3	T	Dimethyl Phthalate	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	84-74-2	T	Di-n-butylphthalate	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	117-84-0	T	Di-n-octylphthalate	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	88-85-7	T	Dinoseb	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	959-98-8	T	Endosulfan I	0.05	U	0.05	ug/l
R6AD1W		11/06/2002	Sample	9	T	Endosulfan II	0.1	U	0.1	ug/l
R6AD1W		11/06/2002	Sample	1031-07-8	T	Endosulfan Sulfate	0.1	U	0.1	ug/l
R6AD1W		11/06/2002	Sample	72-20-8	T	Endrin	0.1	U	0.1	ug/l
R6AD1W		11/06/2002	Sample	7421-93-4	T	Endrin Aldehyde	0.1	U	0.1	ug/l
R6AD1W		11/06/2002	Sample	5	T	Endrin Ketone	0.1	U	0.1	ug/l
R6AD1W		11/06/2002	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	206-44-0	T	Fluoranthene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	86-73-7	T	Fluorene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	58-89-9	T	gamma-BHC (Lindane)	0.05	U	0.05	ug/l
R6AD1W		11/06/2002	Sample	5103-74-2	T	gamma-Chlordane	0.05	U	0.05	ug/l
R6AD1W		11/06/2002	Sample	E-11778	T	Hardness, Carbonate	200		200	Ca
R6AD1W		11/06/2002	Sample	76-44-8	T	Heptachlor	0.05	U	0.05	ug/l
R6AD1W		11/06/2002	Sample	1024-57-3	T	Heptachlor Epoxide	0.05	U	0.05	ug/l
R6AD1W		11/06/2002	Sample	HEPTACH	T	Heptachlorobiphenyl	0.3	U	0.3	ug/l
R6AD1W		11/06/2002	Sample	118-74-1	T	Hexachlorobenzene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	HEXACHL	T	Hexachlorobiphenyl	0.2	U	0.2	ug/l
R6AD1W		11/06/2002	Sample	87-68-3	T	Hexachlorobutadiene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	77-47-4	T	Hexachlorocyclopentadiene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	67-72-1	T	Hexachloroethane	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	7439-89-6	T	Iron	1.1		0.05	mg/l

Appendix II-C1
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2002.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AD1W		11/06/2002	Sample	78-59-1	T	Isophorone	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/l
R6AD1W		11/06/2002	Sample	7439-95-4	T	Magnesium	18		0.5	mg/l
R6AD1W		11/06/2002	Sample	7439-96-5	T	Manganese	0.082		0.01	mg/l
R6AD1W		11/06/2002	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/l
R6AD1W		11/06/2002	Sample	93-65-2	T	MCPP	120	U	120	ug/l
R6AD1W		11/06/2002	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/l
R6AD1W		11/06/2002	Sample	72-43-5	T	Methoxychlor	0.5	U	0.5	ug/l
R6AD1W		11/06/2002	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	MONOCH	T	Monochlorobiphenyl	0.1	U	0.1	ug/l
R6AD1W		11/06/2002	Sample	91-20-3	T	Naphthalene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	7440-02-0	T	Nickel	0.04	U	0.04	mg/l
R6AD1W		11/06/2002	Sample	98-95-3	T	Nitrobenzene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	86-30-6	T	N-Nitrosodiphenylamine	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	NONACHL	T	Nonachlorobiphenyl	0.5	U	0.5	ug/l
R6AD1W		11/06/2002	Sample	BIPHE	T	Octachlorobiphenyl	0.3	U	0.3	ug/l
R6AD1W		11/06/2002	Sample	106-47-8	T	P-Chloroaniline	20	U	20	ug/l
R6AD1W		11/06/2002	Sample	PENTBIP	T	Pentachlorobiphenyl	0.2	U	0.2	ug/l
R6AD1W		11/06/2002	Sample	87-86-5	T	Pentachlorophenol	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	85-01-8	T	Phenanthrene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	108-95-2	T	Phenol	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	100-01-6	T	P-Nitroaniline	50	U	50	ug/l
R6AD1W		11/06/2002	Sample	7440-09-7	T	Potassium	3.5		0.01	mg/l
R6AD1W		11/06/2002	Sample	129-00-0	T	Pyrene	10	U	10	ug/l
R6AD1W		11/06/2002	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/l
R6AD1W		11/06/2002	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/l
R6AD1W		11/06/2002	Sample	7440-23-5	T	Sodium	19		80	mg/l
R6AD1W		11/06/2002	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	TETRACH	T	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
R6AD1W		11/06/2002	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	7440-28-0	T	Thallium	0.01	U	0.01	mg/l
R6AD1W		11/06/2002	Sample	108-88-3	T	Toluene	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	8001-35-2	T	Toxaphene	5	U	5	ug/l
R6AD1W		11/06/2002	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	TRICHLO	T	Trichlorobiphenyl	0.1	U	0.1	ug/l
R6AD1W		11/06/2002	Sample	79-01-6	T	Trichloroethylene	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	7440-62-2	T	Vanadium	0.0042	J	0.01	mg/l
R6AD1W		11/06/2002	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/l
R6AD1W		11/06/2002	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/l
R6AD1W		11/06/2002	Sample	7440-66-6	T	Zinc	0.0053	J	0.02	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7429-90-5	D	Aluminum	0.02	U	0.02	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-36-0	D	Antimony	0.02	U	0.02	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-38-2	D	Arsenic	0.01	U	0.01	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-39-3	D	Barium	0.052		0.01	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-41-7	D	Beryllium	0.004	U	0.004	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-43-9	D	Cadmium	0.005	U	0.005	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-70-2	D	Calcium	49		0.5	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-47-3	D	Chromium	0.01	U	0.01	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-48-4	D	Cobalt	0.01	U	0.01	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-50-8	D	Copper	0.02	U	0.02	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7439-89-6	D	Iron	0.083		0.05	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7439-92-1	D	Lead	0.005	U	0.005	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7439-95-4	D	Magnesium	19		0.5	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7439-96-5	D	Manganese	0.01	U	0.01	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7439-97-6	D	Mercury	0.0002	U	0.0002	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-02-0	D	Nickel	0.04	U	0.04	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-09-7	D	Potassium	3.5		0.01	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7782-49-2	D	Selenium	0.01	U	0.01	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-22-4	D	Silver	0.01	U	0.01	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-23-5	D	Sodium	20	J	80	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-28-0	D	Thallium	0.01	U	0.01	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-62-2	D	Vanadium	0.0019	J	0.01	mg/l
R6AD1W-Filtered	R6AD1W	11/06/2002	Sample	7440-66-6	D	Zinc	0.0033	J	0.02	mg/l

Appendix II-C2

Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	120-82-1	T	1,2,4-Trichlorobenzene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	95-50-1	T	1,2-Dichlorobenzene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	541-73-1	T	1,3-Dichlorobenzene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	106-46-7	T	1,4-Dichlorobenzene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	95-95-4	T	2,4,5-Trichlorophenol	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	88-06-2	T	2,4,6-Trichlorophenol	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	120-83-2	T	2,4-Dichlorophenol	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	105-67-9	T	2,4-Dimethylphenol	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	51-28-5	T	2,4-Dinitrophenol	48	U	48	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	121-14-2	T	2,4-Dinitrotoluene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	606-20-2	T	2,6-Dinitrotoluene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	91-58-7	T	2-Chloronaphthalene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	95-57-8	T	2-Chlorophenol	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	91-57-6	T	2-Methylnaphthalene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	88-74-4	T	2-Nitroaniline	48	U	48	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	88-75-5	T	2-Nitrophenol	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	9	T	3 & 4 Methylphenol	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	91-94-1	T	3,3'-Dichlorobenzidine	19	U	19	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	99-09-2	T	3-Nitroaniline	48	U	48	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	72-54-8	T	4,4'-DDD	0.095	U	0.095	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	72-55-9	T	4,4'-DDE	0.095	U	0.095	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	50-29-3	T	4,4'-DDT	0.095	U	0.095	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	48	U	48	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	59-50-7	T	4-Chloro-3-methylphenol	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	100-02-7	T	4-Nitrophenol	48	U	48	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	83-32-9	T	Acenaphthene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	208-96-8	T	Acenaphthylene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	67-64-1	T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	309-00-2	T	Aldrin	0.048	U	0.048	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	319-84-6	T	alpha-BHC	0.048	U	0.048	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	5103-71-9	T	alpha-Chlordane	0.048	U	0.048	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7429-90-5	T	Aluminum	3.7		0.2	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7429-90-5	D	Aluminum (Dissolved)	0.2	U	0.2	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	120-12-7	T	Anthracene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-36-0	D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-38-2	T	Arsenic	0.005	J	0.01	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-38-2	D	Arsenic (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-39-3	T	Barium	0.11		0.01	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-39-3	D	Barium (Dissolved)	0.074		0.01	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	71-43-2	T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	56-55-3	T	Benzo(a)anthracene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	50-32-8	T	Benzo(a)pyrene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	205-99-2	T	Benzo(b)fluoranthene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	191-24-2	T	Benzo(g,h,i)perylene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	207-08-9	T	Benzo(k)fluoranthene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	85-68-7	T	Benzyl Butyl Phthalate	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-41-7	T	Beryllium	0.00014	J	0.004	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-41-7	D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	319-85-7	T	beta-BHC	0.048	U	0.048	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	111-44-4	T	bis(2-Chloroethyl)ether	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	75-25-2	T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	74-83-9	T	Bromomethane	1	U	1	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-43-9	D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-70-2	T	Calcium	45		0.5	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-70-2	D	Calcium (Dissolved)	44		0.5	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	86-74-8	T	Carbazole	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	75-00-3	T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	67-66-3	T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	74-87-3	T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-47-3	T	Chromium	0.0045	J	0.01	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-47-3	D	Chromium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	218-01-9	T	Chrysene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-48-4	T	Cobalt	0.0016	J	0.01	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-48-4	D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-50-8	T	Copper	0.0044	J	0.02	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-50-8	D	Copper (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	75-99-0	T	Dalapon	9.9	U	9.9	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	319-86-8	T	delta-BHC	0.048	U	0.048	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	53-70-3	T	Dibenzo(a,h)anthracene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	132-64-9	T	Dibenzofuran	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	1918-00-9	T	Dicamba	0.5	U	0.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	120-36-5	T	Dichlorprop	0.5	U	0.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	60-57-1	T	Dieldrin	0.095	U	0.095	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	84-66-2	T	Diethyl Phthalate	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	131-11-3	T	Dimethyl Phthalate	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	84-74-2	T	Di-n-butylphthalate	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	117-84-0	T	Di-n-octylphthalate	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	88-85-7	T	Dinoseb	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	959-98-8	T	Endosulfan I	0.048	U	0.048	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	9	T	Endosulfan II	0.095	U	0.095	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	1031-07-8	T	Endosulfan Sulfate	0.095	U	0.095	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	72-20-8	T	Endrin	0.095	U	0.095	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7421-93-4	T	Endrin Aldehyde	0.095	U	0.095	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	5	T	Endrin Ketone	0.095	U	0.095	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	206-44-0	T	Fluoranthene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	86-73-7	T	Fluorene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	58-89-9	T	gamma-BHC (Lindane)	0.048	U	0.048	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	5103-74-2	T	gamma-Chlordane	0.048	U	0.048	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	76-44-8	T	Heptachlor	0.048	U	0.048	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	1024-57-3	T	Heptachlor Epoxide	0.048	U	0.048	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	118-74-1	T	Hexachlorobenzene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	87-68-3	T	Hexachlorobutadiene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	77-47-4	T	Hexachlorocyclopentadiene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	67-72-1	T	Hexachloroethane	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7439-89-6	T	Iron	3.5		0.05	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7439-89-6	D	Iron (Dissolved)	0.05	U	0.05	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	78-59-1	T	Isophorone	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7439-92-1	T	Lead	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7439-92-1	D	Lead (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7439-95-4	T	Magnesium	21		0.5	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7439-95-4	D	Magnesium (Dissolved)	20		0.5	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7439-96-5	T	Manganese	0.24		0.01	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7439-96-5	D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	93-65-2	T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7439-97-6	D	Mercury (Dissolved)	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	72-43-5	T	Methoxychlor	0.48	U	0.48	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	91-20-3	T	Naphthalene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-02-0	T	Nickel	0.0064	J	0.04	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-02-0	D	Nickel (Dissolved)	0.0027	J	0.04	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	98-95-3	T	Nitrobenzene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	86-30-6	T	N-Nitrosodiphenylamine	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	106-47-8	T	P-Chloroaniline	19	U	19	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	87-86-5	T	Pentachlorophenol	0.25	U	0.25	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	85-01-8	T	Phenanthrene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	108-95-2	T	Phenol	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	100-01-6	T	P-Nitroaniline	48	U	48	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-09-7	T	Potassium	5.4		1	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-09-7	D	Potassium (Dissolved)	4.7		1	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	129-00-0	T	Pyrene	9.5	U	9.5	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7782-49-2	D	Selenium (Dissolved)	0.0072	U	0.01	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-22-4	D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-23-5	T	Sodium	30		1	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-23-5	D	Sodium (Dissolved)	30		1	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-28-0	T	Thallium	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-28-0	D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	108-88-3	T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	8001-35-2	T	Toxaphene	4.8	U	4.8	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	79-01-6	T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-62-2	T	Vanadium	0.011		0.01	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-62-2	D	Vanadium (Dissolved)	0.0038	J	0.01	mg/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-PDA9A		9/22/2005	Sample	7440-66-6	T	Zinc	0.014	J	0.02	mg/L
SW-SA2-GMCS-PDA9A	PDA9A	9/22/2005	Sample	7440-66-6	D	Zinc (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	120-82-1	T	1,2,4-Trichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	95-50-1	T	1,2-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	541-73-1	T	1,3-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	106-46-7	T	1,4-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	93-76-5	T	2,4,5-T	0.5	U	0.5	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	95-95-4	T	2,4,5-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	88-06-2	T	2,4,6-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	94-75-7	T	2,4-D	0.5	U	0.5	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	94-82-6	T	2,4-DB	0.5	U	0.5	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	120-83-2	T	2,4-Dichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	105-67-9	T	2,4-Dimethylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	51-28-5	T	2,4-Dinitrophenol	47	U	47	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	121-14-2	T	2,4-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	606-20-2	T	2,6-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	91-58-7	T	2-Chloronaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	95-57-8	T	2-Chlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	91-57-6	T	2-Methylnaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	88-74-4	T	2-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	88-75-5	T	2-Nitrophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	9	T	3 & 4 Methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	91-94-1	T	3,3'-Dichlorobenzidine	19	U	19	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	99-09-2	T	3-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	72-54-8	T	4,4'-DDD	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	72-55-9	T	4,4'-DDE	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	50-29-3	T	4,4'-DDT	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	47	U	47	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	59-50-7	T	4-Chloro-3-methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	100-02-7	T	4-Nitrophenol	47	U	47	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	83-32-9	T	Acenaphthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	208-96-8	T	Acenaphthylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	67-64-1	T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	309-00-2	T	Aldrin	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	319-84-6	T	alpha-BHC	0.048	UJ	0.048	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA9		9/22/2005	Sample	5103-71-9	T	alpha-Chlordane	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7429-90-5	T	Aluminum	3.4	J	0.2	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7429-90-5	D	Aluminum (Dissolved)	0.2	U	0.2	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	120-12-7	T	Anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-36-0	D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-38-2	D	Arsenic (Dissolved)	0.0062	J	0.01	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-39-3	T	Barium	0.11		0.01	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-39-3	D	Barium (Dissolved)	0.074		0.01	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	71-43-2	T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	56-55-3	T	Benzo(a)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	50-32-8	T	Benzo(a)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	205-99-2	T	Benzo(b)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	191-24-2	T	Benzo(g,h,i)perylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	207-08-9	T	Benzo(k)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	85-68-7	T	Benzyl Butyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-41-7	T	Beryllium	0.00017	J	0.004	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-41-7	D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	319-85-7	T	beta-BHC	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	111-44-4	T	bis(2-Chloroethyl)ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	75-25-2	T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	74-83-9	T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-43-9	D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-70-2	T	Calcium	45		0.5	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-70-2	D	Calcium (Dissolved)	43		0.5	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	86-74-8	T	Carbazole	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	75-00-3	T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	67-66-3	T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	74-87-3	T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-47-3	T	Chromium	0.0038	J	0.01	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-47-3	D	Chromium (Dissolved)	0.00087	J	0.01	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	218-01-9	T	Chrysene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-48-4	T	Cobalt	0.0015	J	0.01	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-48-4	D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-50-8	T	Copper	0.0038	J	0.02	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-50-8	D	Copper (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	75-99-0	T	Dalapon	9.9	U	9.9	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	319-86-8	T	delta-BHC	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	53-70-3	T	Dibenzo(a,h)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	132-64-9	T	Dibenzofuran	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	1918-00-9	T	Dicamba	0.5	U	0.5	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	120-36-5	T	Dichlorprop	0.5	U	0.5	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	60-57-1	T	Dieldrin	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	84-66-2	T	Diethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	131-11-3	T	Dimethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	84-74-2	T	Di-n-butylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	117-84-0	T	Di-n-octylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	88-85-7	T	Dinoseb	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	959-98-8	T	Endosulfan I	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	9	T	Endosulfan II	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	1031-07-8	T	Endosulfan Sulfate	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	72-20-8	T	Endrin	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7421-93-4	T	Endrin Aldehyde	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	5	T	Endrin Ketone	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	206-44-0	T	Fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	86-73-7	T	Fluorene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	58-89-9	T	gamma-BHC (Lindane)	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	5103-74-2	T	gamma-Chlordane	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	76-44-8	T	Heptachlor	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	1024-57-3	T	Heptachlor Epoxide	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	118-74-1	T	Hexachlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	87-68-3	T	Hexachlorobutadiene	9.4	U	9.4	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA9		9/22/2005	Sample	77-47-4	T	Hexachlorocyclopentadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	67-72-1	T	Hexachloroethane	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7439-89-6	T	Iron	3.3		0.05	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7439-89-6	D	Iron (Dissolved)	0.05	U	0.05	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	78-59-1	T	Isophorone	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7439-92-1	T	Lead	0.0047	J	0.005	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7439-92-1	D	Lead (Dissolved)	0.0027	J	0.005	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7439-95-4	T	Magnesium	21		0.5	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7439-95-4	D	Magnesium (Dissolved)	20		0.5	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7439-96-5	T	Manganese	0.24		0.01	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7439-96-5	D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	93-65-2	T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7439-97-6	T	Mercury	8.6E-05	J	0.0002	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7439-97-6	D	Mercury (Dissolved)	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	72-43-5	T	Methoxychlor	0.48	UJ	0.48	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	91-20-3	T	Naphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-02-0	T	Nickel	0.0065	J	0.04	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-02-0	D	Nickel (Dissolved)	0.0029	J	0.04	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	98-95-3	T	Nitrobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	86-30-6	T	N-Nitrosodiphenylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	106-47-8	T	P-Chloroaniline	19	U	19	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	87-86-5	T	Pentachlorophenol	0.25	U	0.25	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	85-01-8	T	Phenanthrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	108-95-2	T	Phenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	100-01-6	T	P-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-09-7	T	Potassium	5.4		1	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-09-7	D	Potassium (Dissolved)	4.7		1	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	129-00-0	T	Pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7782-49-2	D	Selenium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-22-4	D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-23-5	T	Sodium	31		1	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-23-5	D	Sodium (Dissolved)	31		1	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-28-0	T	Thallium	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-28-0	D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	108-88-3	T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	8001-35-2	T	Toxaphene	4.8	UJ	4.8	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	79-01-6	T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-62-2	T	Vanadium	0.011		0.01	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-62-2	D	Vanadium (Dissolved)	0.0043	J	0.01	mg/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-PDA9		9/22/2005	Sample	7440-66-6	T	Zinc	0.014	J	0.02	mg/L
SW-SA2-GMCS-PDA9	PDA9	9/22/2005	Sample	7440-66-6	D	Zinc (Dissolved)	0.0031	J	0.02	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	120-82-1	T	1,2,4-Trichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	95-50-1	T	1,2-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	541-73-1	T	1,3-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	106-46-7	T	1,4-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	93-76-5	T	2,4,5-T	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	95-95-4	T	2,4,5-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	88-06-2	T	2,4,6-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	94-75-7	T	2,4-D	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	94-82-6	T	2,4-DB	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	120-83-2	T	2,4-Dichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	105-67-9	T	2,4-Dimethylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	51-28-5	T	2,4-Dinitrophenol	47	U	47	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA5		9/22/2005	Sample	121-14-2	T	2,4-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	606-20-2	T	2,6-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	91-58-7	T	2-Chloronaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	95-57-8	T	2-Chlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	91-57-6	T	2-Methylnaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	88-74-4	T	2-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	88-75-5	T	2-Nitrophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	9	T	3 & 4 Methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	91-94-1	T	3,3'-Dichlorobenzidine	19	U	19	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	99-09-2	T	3-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	72-54-8	T	4,4'-DDD	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	72-55-9	T	4,4'-DDE	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	50-29-3	T	4,4'-DDT	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	47	U	47	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	59-50-7	T	4-Chloro-3-methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	100-02-7	T	4-Nitrophenol	47	U	47	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	83-32-9	T	Acenaphthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	208-96-8	T	Acenaphthylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	67-64-1	T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	309-00-2	T	Aldrin	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	319-84-6	T	alpha-BHC	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	5103-71-9	T	alpha-Chlordane	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7429-90-5	T	Aluminum	3.8		0.2	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7429-90-5	D	Aluminum (Dissolved)	0.2	U	0.2	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	120-12-7	T	Anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-36-0	D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-38-2	D	Arsenic (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-39-3	T	Barium	0.12		0.01	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-39-3	D	Barium (Dissolved)	0.074		0.01	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	71-43-2	T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	56-55-3	T	Benzo(a)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	50-32-8	T	Benzo(a)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	205-99-2	T	Benzo(b)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	191-24-2	T	Benzo(g,h,i)perylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	207-08-9	T	Benzo(k)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	85-68-7	T	Benzyl Butyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-41-7	T	Beryllium	0.00015	J	0.004	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-41-7	D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	319-85-7	T	beta-BHC	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	111-44-4	T	bis(2-Chloroethyl)ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	75-25-2	T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	74-83-9	T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-43-9	D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-70-2	T	Calcium	45		0.5	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-70-2	D	Calcium (Dissolved)	43		0.5	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	86-74-8	T	Carbazole	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	75-00-3	T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	67-66-3	T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	74-87-3	T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-47-3	T	Chromium	0.0047	J	0.01	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-47-3	D	Chromium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	218-01-9	T	Chrysene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-48-4	T	Cobalt	0.0012	J	0.01	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-48-4	D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-50-8	T	Copper	0.005	J	0.02	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-50-8	D	Copper (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	75-99-0	T	Dalapon	9.7	U	9.7	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	319-86-8	T	delta-BHC	0.047	UJ	0.047	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA5		9/22/2005	Sample	53-70-3	T	Dibenzo(a,h)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	132-64-9	T	Dibenzofuran	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	1918-00-9	T	Dicamba	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	120-36-5	T	Dichlorprop	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	60-57-1	T	Dieldrin	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	84-66-2	T	Diethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	131-11-3	T	Dimethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	84-74-2	T	Di-n-butylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	117-84-0	T	Di-n-octylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	88-85-7	T	Dinoseb	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	959-98-8	T	Endosulfan I	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	9	T	Endosulfan II	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	1031-07-8	T	Endosulfan Sulfate	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	72-20-8	T	Endrin	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7421-93-4	T	Endrin Aldehyde	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	5	T	Endrin Ketone	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	206-44-0	T	Fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	86-73-7	T	Fluorene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	58-89-9	T	gamma-BHC (Lindane)	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	5103-74-2	T	gamma-Chlordane	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	76-44-8	T	Heptachlor	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	1024-57-3	T	Heptachlor Epoxide	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	118-74-1	T	Hexachlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	87-68-3	T	Hexachlorobutadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	77-47-4	T	Hexachlorocyclopentadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	67-72-1	T	Hexachloroethane	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7439-89-6	T	Iron	3.5		0.05	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7439-89-6	D	Iron (Dissolved)	0.05	U	0.05	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	78-59-1	T	Isophorone	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7439-92-1	T	Lead	0.0035	J	0.005	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7439-92-1	D	Lead (Dissolved)	0.0022	J	0.005	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7439-95-4	T	Magnesium	21		0.5	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7439-95-4	D	Magnesium (Dissolved)	20		0.5	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7439-96-5	T	Manganese	0.25		0.01	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7439-96-5	D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	93-65-2	T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7439-97-6	D	Mercury (Dissolved)	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	72-43-5	T	Methoxychlor	0.47	UJ	0.47	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	91-20-3	T	Naphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-02-0	T	Nickel	0.006	J	0.04	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-02-0	D	Nickel (Dissolved)	0.0023	J	0.04	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	98-95-3	T	Nitrobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	86-30-6	T	N-Nitrosodiphenylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	106-47-8	T	P-Chloroaniline	19	U	19	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	87-86-5	T	Pentachlorophenol	0.24	U	0.24	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	85-01-8	T	Phenanthrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	108-95-2	T	Phenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	100-01-6	T	P-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-09-7	T	Potassium	5.5		1	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-09-7	D	Potassium (Dissolved)	4.7		1	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	129-00-0	T	Pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7782-49-2	D	Selenium (Dissolved)	0.0078	U	0.01	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-22-4	D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-23-5	T	Sodium	32		1	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-23-5	D	Sodium (Dissolved)	32		1	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-28-0	T	Thallium	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-28-0	D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	108-88-3	T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	8001-35-2	T	Toxaphene	4.7	UJ	4.7	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	79-01-6	T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-62-2	T	Vanadium	0.011		0.01	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-62-2	D	Vanadium (Dissolved)	0.0032	J	0.01	mg/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA5		9/22/2005	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-PDA5		9/22/2005	Sample	7440-66-6	T	Zinc	0.065		0.02	mg/L
SW-SA2-GMCS-PDA5	PDA5	9/22/2005	Sample	7440-66-6	D	Zinc (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	120-82-1	T	1,2,4-Trichlorobenzene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	95-50-1	T	1,2-Dichlorobenzene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	541-73-1	T	1,3-Dichlorobenzene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	106-46-7	T	1,4-Dichlorobenzene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	93-76-5	T	2,4,5-T	0.48	U	0.48	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.48	U	0.48	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	95-95-4	T	2,4,5-Trichlorophenol	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	88-06-2	T	2,4,6-Trichlorophenol	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	94-75-7	T	2,4-D	0.25	JP	0.48	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	94-82-6	T	2,4-DB	0.48	U	0.48	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	120-83-2	T	2,4-Dichlorophenol	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	105-67-9	T	2,4-Dimethylphenol	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	51-28-5	T	2,4-Dinitrophenol	47	UJ	47	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	121-14-2	T	2,4-Dinitrotoluene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	606-20-2	T	2,6-Dinitrotoluene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	91-58-7	T	2-Chloronaphthalene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Duplicate	95-57-8	T	2-Chlorophenol	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	91-57-6	T	2-Methylnaphthalene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	88-74-4	T	2-Nitroaniline	47	UJ	47	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	88-75-5	T	2-Nitrophenol	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	9	T	3 & 4 Methylphenol	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	91-94-1	T	3,3'-Dichlorobenzidine	19	UJ	19	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	99-09-2	T	3-Nitroaniline	47	UJ	47	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	72-54-8	T	4,4'-DDD	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	72-55-9	T	4,4'-DDE	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	50-29-3	T	4,4'-DDT	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	47	UJ	47	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	59-50-7	T	4-Chloro-3-methylphenol	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	100-02-7	T	4-Nitrophenol	47	UJ	47	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	83-32-9	T	Acenaphthene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	208-96-8	T	Acenaphthylene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	67-64-1	T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	309-00-2	T	Aldrin	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	319-84-6	T	alpha-BHC	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	5103-71-9	T	alpha-Chlordane	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7429-90-5	T	Aluminum	3.1		0.2	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7429-90-5	D	Aluminum (Dissolved)	0.2	U	0.2	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	120-12-7	T	Anthracene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-36-0	D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-38-2	T	Arsenic	0.0066	J	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-38-2	D	Arsenic (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-39-3	T	Barium	0.11		0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-39-3	D	Barium (Dissolved)	0.076		0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	71-43-2	T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	56-55-3	T	Benzo(a)anthracene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	50-32-8	T	Benzo(a)pyrene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	205-99-2	T	Benzo(b)fluoranthene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	191-24-2	T	Benzo(g,h,i)perylene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	207-08-9	T	Benzo(k)fluoranthene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	85-68-7	T	Benzyl Butyl Phthalate	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-41-7	T	Beryllium	0.00014	J	0.004	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-41-7	D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	319-85-7	T	beta-BHC	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	111-44-4	T	bis(2-Chloroethyl)ether	9.4	UJ	9.4	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA2		9/22/2005	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	75-25-2	T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	74-83-9	T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Duplicate	7440-43-9	T	Cadmium	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-43-9	D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-70-2	T	Calcium	46		0.5	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-70-2	D	Calcium (Dissolved)	45		0.5	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	86-74-8	T	Carbazole	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	108-90-7	T	Chlorobenzene	0.87	UJ	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	75-00-3	T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	67-66-3	T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	74-87-3	T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-47-3	T	Chromium	0.0038	J	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-47-3	D	Chromium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	218-01-9	T	Chrysene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-48-4	T	Cobalt	0.0014	J	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-48-4	D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-50-8	T	Copper	0.0039	J	0.02	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-50-8	D	Copper (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	75-99-0	T	Dalapon	9.6	U	9.6	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	319-86-8	T	delta-BHC	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	53-70-3	T	Dibenzo(a,h)anthracene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	132-64-9	T	Dibenzofuran	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	1918-00-9	T	Dicamba	0.48	U	0.48	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	120-36-5	T	Dichlorprop	0.48	U	0.48	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	60-57-1	T	Dieldrin	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	84-66-2	T	Diethyl Phthalate	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	131-11-3	T	Dimethyl Phthalate	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	84-74-2	T	Di-n-butylphthalate	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	117-84-0	T	Di-n-octylphthalate	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	88-85-7	T	Dinoseb	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	959-98-8	T	Endosulfan I	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	9	T	Endosulfan II	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	1031-07-8	T	Endosulfan Sulfate	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	72-20-8	T	Endrin	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7421-93-4	T	Endrin Aldehyde	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	5	T	Endrin Ketone	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	206-44-0	T	Fluoranthene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	86-73-7	T	Fluorene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	58-89-9	T	gamma-BHC (Lindane)	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	5103-74-2	T	gamma-Chlordane	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	76-44-8	T	Heptachlor	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	1024-57-3	T	Heptachlor Epoxide	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	118-74-1	T	Hexachlorobenzene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	87-68-3	T	Hexachlorobutadiene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Duplicate	77-47-4	T	Hexachlorocyclopentadiene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	67-72-1	T	Hexachloroethane	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7439-89-6	T	Iron	3		0.05	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7439-89-6	D	Iron (Dissolved)	0.05	U	0.05	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	78-59-1	T	Isophorone	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7439-92-1	T	Lead	0.0047	J	0.005	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7439-92-1	D	Lead (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7439-95-4	T	Magnesium	21		0.5	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7439-95-4	D	Magnesium (Dissolved)	21		0.5	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7439-96-5	T	Manganese	0.24		0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7439-96-5	D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	93-65-2	T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7439-97-6	D	Mercury (Dissolved)	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	72-43-5	T	Methoxychlor	0.47	UJ	0.47	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	91-20-3	T	Naphthalene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-02-0	T	Nickel	0.0064	J	0.04	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-02-0	D	Nickel (Dissolved)	0.0024	J	0.04	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	98-95-3	T	Nitrobenzene	9.4	UJ	9.4	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA2		9/22/2005	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	86-30-6	T	N-Nitrosodiphenylamine	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	106-47-8	T	P-Chloroaniline	19	UJ	19	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	87-86-5	T	Pentachlorophenol	0.24	U	0.24	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	85-01-8	T	Phenanthrene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	108-95-2	T	Phenol	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	100-01-6	T	P-Nitroaniline	47	UJ	47	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-09-7	T	Potassium	5.5		1	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-09-7	D	Potassium (Dissolved)	4.8		1	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	129-00-0	T	Pyrene	9.4	UJ	9.4	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7782-49-2	T	Selenium	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7782-49-2	D	Selenium (Dissolved)	0.0075	J B	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-22-4	D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-23-5	T	Sodium	35		1	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-23-5	D	Sodium (Dissolved)	34		1	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-28-0	T	Thallium	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-28-0	D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	108-88-3	T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	8001-35-2	T	Toxaphene	4.7	UJ	4.7	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	79-01-6	T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-62-2	T	Vanadium	0.0097	J	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-62-2	D	Vanadium (Dissolved)	0.0033	J	0.01	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-66-6	T	Zinc	0.052		0.02	mg/L
SW-SA2-GMCS-PDA2		9/22/2005	Sample	7440-66-6	D	Zinc (Dissolved)	0.0061	J	0.02	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	120-82-1	T	1,2,4-Trichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	95-50-1	T	1,2-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	541-73-1	T	1,3-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	106-46-7	T	1,4-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	93-76-5	T	2,4,5-T	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	93-72-1	T	2,4,5-TP (Silvex)	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	95-95-4	T	2,4,5-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	88-06-2	T	2,4,6-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	94-75-7	T	2,4-D	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	94-82-6	T	2,4-DB	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	120-83-2	T	2,4-Dichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	105-67-9	T	2,4-Dimethylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	51-28-5	T	2,4-Dinitrophenol	47	U	47	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	121-14-2	T	2,4-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	606-20-2	T	2,6-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	91-58-7	T	2-Chloronaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Sample	95-57-8	T	2-Chlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	91-57-6	T	2-Methylnaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	95-48-7	T	2-Methylphenol (o-Cresol)	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	88-74-4	T	2-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	88-75-5	T	2-Nitrophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	9	T	3 & 4 Methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	91-94-1	T	3,3'-Dichlorobenzidine	19	U	19	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	99-09-2	T	3-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	72-54-8	T	4,4'-DDD	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	72-55-9	T	4,4'-DDE	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	50-29-3	T	4,4'-DDT	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	534-52-1	T	4,6-Dinitro-2-methylphenol	47	U	47	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	101-55-3	T	4-Bromophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	59-50-7	T	4-Chloro-3-methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7005-72-3	T	4-Chlorophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	100-02-7	T	4-Nitrophenol	47	U	47	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	83-32-9	T	Acenaphthene	9.4	U	9.4	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	208-96-8	T	Acenaphthylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	67-64-1	T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	309-00-2	T	Aldrin	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	319-84-6	T	alpha-BHC	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	5103-71-9	T	alpha-Chlordane	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7429-90-5	T	Aluminum	2.4		0.2	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7429-90-5	D	Aluminum (Dissolved)	0.2	U	0.2	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	120-12-7	T	Anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-36-0	T	Antimony	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-36-0	D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-38-2	T	Arsenic	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-38-2	D	Arsenic (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-39-3	T	Barium	0.11		0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-39-3	D	Barium (Dissolved)	0.074		0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	71-43-2	T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	56-55-3	T	Benzo(a)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	50-32-8	T	Benzo(a)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	205-99-2	T	Benzo(b)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	191-24-2	T	Benzo(g,h,i)perylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	207-08-9	T	Benzo(k)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	85-68-7	T	Benzyl Butyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-41-7	T	Beryllium	0.00012	J	0.004	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-41-7	D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	319-85-7	T	beta-BHC	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	111-91-1	T	bis(2-Chloroethoxy)methane	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	111-44-4	T	bis(2-Chloroethyl)ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	117-81-7	T	bis(2-Ethylhexyl)phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	75-27-4	T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	75-25-2	T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	74-83-9	T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-43-9	D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-70-2	T	Calcium	46		0.5	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-70-2	D	Calcium (Dissolved)	43		0.5	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	86-74-8	T	Carbazole	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	75-15-0	T	Carbon Disulfide	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	108-90-7	T	Chlorobenzene	4.3	J	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	124-48-1	T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	75-00-3	T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	67-66-3	T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	74-87-3	T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-47-3	T	Chromium	0.0028	J	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-47-3	D	Chromium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	218-01-9	T	Chrysene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	5	T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-48-4	T	Cobalt	0.0013	J	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-48-4	D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-50-8	T	Copper	0.0033	J	0.02	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-50-8	D	Copper (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	75-99-0	T	Dalapon	9.7	U	9.7	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	319-86-8	T	delta-BHC	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	53-70-3	T	Dibenzo(a,h)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	132-64-9	T	Dibenzofuran	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	1918-00-9	T	Dicamba	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	75-09-2	T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	120-36-5	T	Dichlorprop	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	60-57-1	T	Dieldrin	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	84-66-2	T	Diethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	131-11-3	T	Dimethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	84-74-2	T	Di-n-butylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	117-84-0	T	Di-n-octylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	88-85-7	T	Dinoseb	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	959-98-8	T	Endosulfan I	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	9	T	Endosulfan II	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	1031-07-8	T	Endosulfan Sulfate	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	72-20-8	T	Endrin	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7421-93-4	T	Endrin Aldehyde	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	5	T	Endrin Ketone	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	100-41-4	T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	206-44-0	T	Fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	86-73-7	T	Fluorene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	58-89-9	T	gamma-BHC (Lindane)	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	5103-74-2	T	gamma-Chlordane	0.047	UJ	0.047	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	76-44-8	T	Heptachlor	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	1024-57-3	T	Heptachlor Epoxide	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	118-74-1	T	Hexachlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	87-68-3	T	Hexachlorobutadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Sample	77-47-4	T	Hexachlorocyclopentadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	67-72-1	T	Hexachloroethane	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	193-39-5	T	Indeno(1,2,3-cd)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7439-89-6	T	Iron	2.3		0.05	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7439-89-6	D	Iron (Dissolved)	0.05	U	0.05	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	78-59-1	T	Isophorone	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7439-92-1	T	Lead	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7439-92-1	D	Lead (Dissolved)	0.0024	J	0.005	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7439-95-4	T	Magnesium	21		0.5	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7439-95-4	D	Magnesium (Dissolved)	20		0.5	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7439-96-5	T	Manganese	0.21		0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7439-96-5	D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	93-65-2	T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7439-97-6	D	Mercury (Dissolved)	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	72-43-5	T	Methoxychlor	0.47	UJ	0.47	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	91-20-3	T	Naphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-02-0	T	Nickel	0.0046	J	0.04	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-02-0	D	Nickel (Dissolved)	0.04	U	0.04	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	98-95-3	T	Nitrobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	621-64-7	T	N-Nitroso-di-n-propylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	86-30-6	T	N-Nitrosodiphenylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	106-47-8	T	P-Chloroaniline	19	U	19	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	87-86-5	T	Pentachlorophenol	0.24	U	0.24	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	85-01-8	T	Phenanthrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	108-95-2	T	Phenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	100-01-6	T	P-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-09-7	T	Potassium	5.4		1	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-09-7	D	Potassium (Dissolved)	4.7		1	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	129-00-0	T	Pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7782-49-2	T	Selenium	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7782-49-2	D	Selenium (Dissolved)	0.0066	U	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-22-4	T	Silver	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-22-4	D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-23-5	T	Sodium	35		1	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-23-5	D	Sodium (Dissolved)	33		1	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	100-42-5	T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	127-18-4	T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-28-0	T	Thallium	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-28-0	D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	108-88-3	T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	8001-35-2	T	Toxaphene	4.7	UJ	4.7	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	6	T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	79-01-6	T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-62-2	T	Vanadium	0.0084	J	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-62-2	D	Vanadium (Dissolved)	0.002	J	0.01	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	75-01-4	T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	1330-20-7	T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-66-6	T	Zinc	0.019	J	0.02	mg/L
SW-SA2-GMCS-PDA2 DUP	PDA2	9/22/2005	Duplicate	7440-66-6	D	Zinc (Dissolved)	0.0037	J	0.02	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	120-82-1	T	1,2,4-Trichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	95-50-1	T	1,2-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	541-73-1	T	1,3-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	106-46-7	T	1,4-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	93-76-5	T	2,4,5-T	0.48	U	0.48	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.48	U	0.48	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	95-95-4	T	2,4,5-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	88-06-2	T	2,4,6-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	94-75-7	T	2,4-D	0.48	U	0.48	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA3		9/22/2005	Sample	94-82-6	T	2,4-DB	0.48	U	0.48	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	120-83-2	T	2,4-Dichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	105-67-9	T	2,4-Dimethylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	51-28-5	T	2,4-Dinitrophenol	47	U	47	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	121-14-2	T	2,4-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	606-20-2	T	2,6-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	91-58-7	T	2-Chloronaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	95-57-8	T	2-Chlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	91-57-6	T	2-Methylnaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	88-74-4	T	2-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	88-75-5	T	2-Nitrophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	9	T	3 & 4 Methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	91-94-1	T	3,3'-Dichlorobenzidine	19	U	19	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	99-09-2	T	3-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	72-54-8	T	4,4'-DDD	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	72-55-9	T	4,4'-DDE	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	50-29-3	T	4,4'-DDT	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	47	U	47	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	59-50-7	T	4-Chloro-3-methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	100-02-7	T	4-Nitrophenol	47	U	47	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	83-32-9	T	Acenaphthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	208-96-8	T	Acenaphthylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	67-64-1	T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	309-00-2	T	Aldrin	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	319-84-6	T	alpha-BHC	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	5103-71-9	T	alpha-Chlordane	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7429-90-5	T	Aluminum	3.2		0.2	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7429-90-5	D	Aluminum (Dissolved)	0.2	U	0.2	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	120-12-7	T	Anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-36-0	D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-38-2	T	Arsenic	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-38-2	D	Arsenic (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-39-3	T	Barium	0.11		0.01	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-39-3	D	Barium (Dissolved)	0.076		0.01	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	71-43-2	T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	56-55-3	T	Benzo(a)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	50-32-8	T	Benzo(a)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	205-99-2	T	Benzo(b)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	191-24-2	T	Benzo(g,h,i)perylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	207-08-9	T	Benzo(k)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	85-68-7	T	Benzyl Butyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-41-7	T	Beryllium	0.00013	J	0.004	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-41-7	D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	319-85-7	T	beta-BHC	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	111-44-4	T	bis(2-Chloroethyl)ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	75-25-2	T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	74-83-9	T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-43-9	D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-70-2	T	Calcium	46		0.5	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-70-2	D	Calcium (Dissolved)	44		0.5	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	86-74-8	T	Carbazole	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	108-90-7	T	Chlorobenzene	0.49	J	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	75-00-3	T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	67-66-3	T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	74-87-3	T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-47-3	T	Chromium	0.0039	J	0.01	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-47-3	D	Chromium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	218-01-9	T	Chrysene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-48-4	T	Cobalt	0.0015	J	0.01	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-48-4	D	Cobalt (Dissolved)	0.01	U	0.01	mg/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-50-8	T	Copper	0.0036	J	0.02	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-50-8	D	Copper (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	75-99-0	T	Dalapon	9.6	U	9.6	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	319-86-8	T	delta-BHC	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	53-70-3	T	Dibenzo(a,h)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	132-64-9	T	Dibenzofuran	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	1918-00-9	T	Dicamba	0.48	U	0.48	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	120-36-5	T	Dichlorprop	0.48	U	0.48	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	60-57-1	T	Dieldrin	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	84-66-2	T	Diethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	131-11-3	T	Dimethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	84-74-2	T	Di-n-butylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	117-84-0	T	Di-n-octylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	88-85-7	T	Dinoseb	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	959-98-8	T	Endosulfan I	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	9	T	Endosulfan II	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	1031-07-8	T	Endosulfan Sulfate	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	72-20-8	T	Endrin	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7421-93-4	T	Endrin Aldehyde	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	5	T	Endrin Ketone	0.094	UJ	0.094	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	206-44-0	T	Fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	86-73-7	T	Fluorene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	58-89-9	T	gamma-BHC (Lindane)	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	5103-74-2	T	gamma-Chlordane	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	76-44-8	T	Heptachlor	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	1024-57-3	T	Heptachlor Epoxide	0.047	UJ	0.047	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	118-74-1	T	Hexachlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	87-68-3	T	Hexachlorobutadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	77-47-4	T	Hexachlorocyclopentadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	67-72-1	T	Hexachloroethane	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7439-89-6	T	Iron	3		0.05	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7439-89-6	D	Iron (Dissolved)	0.05	U	0.05	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	78-59-1	T	Isophorone	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7439-92-1	T	Lead	0.0045	J	0.005	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7439-92-1	D	Lead (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7439-95-4	T	Magnesium	21		0.5	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7439-95-4	D	Magnesium (Dissolved)	20		0.5	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7439-96-5	T	Manganese	0.21		0.01	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7439-96-5	D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	93-65-2	T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7439-97-6	D	Mercury (Dissolved)	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	72-43-5	T	Methoxychlor	0.47	UJ	0.47	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	91-20-3	T	Naphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-02-0	T	Nickel	0.0055	J	0.04	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-02-0	D	Nickel (Dissolved)	0.002	J	0.04	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	98-95-3	T	Nitrobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	86-30-6	T	N-Nitrosodiphenylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	106-47-8	T	P-Chloroaniline	19	U	19	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	87-86-5	T	Pentachlorophenol	0.24	U	0.24	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	85-01-8	T	Phenanthrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	108-95-2	T	Phenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	100-01-6	T	P-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-09-7	T	Potassium	5.5		1	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-09-7	D	Potassium (Dissolved)	4.9		1	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	129-00-0	T	Pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7782-49-2	T	Selenium	0.0067	U	0.01	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7782-49-2	D	Selenium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-22-4	D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-23-5	T	Sodium	34		1	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-23-5	D	Sodium (Dissolved)	34		1	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-28-0	T	Thallium	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-28-0	D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	108-88-3	T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	8001-35-2	T	Toxaphene	4.7	UJ	4.7	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA3		9/22/2005	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	79-01-6	T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-62-2	T	Vanadium	0.01		0.01	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-62-2	D	Vanadium (Dissolved)	0.0031	J	0.01	mg/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-PDA3		9/22/2005	Sample	7440-66-6	T	Zinc	0.03		0.02	mg/L
SW-SA2-GMCS-PDA3	PDA3	9/22/2005	Sample	7440-66-6	D	Zinc (Dissolved)	0.0065	J	0.02	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	120-82-1	T	1,2,4-Trichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	95-50-1	T	1,2-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	541-73-1	T	1,3-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	106-46-7	T	1,4-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	93-76-5	T	2,4,5-T	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	95-95-4	T	2,4,5-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	88-06-2	T	2,4,6-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	94-75-7	T	2,4-D	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	94-82-6	T	2,4-DB	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	120-83-2	T	2,4-Dichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	105-67-9	T	2,4-Dimethylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	51-28-5	T	2,4-Dinitrophenol	47	U	47	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	121-14-2	T	2,4-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	606-20-2	T	2,6-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	91-58-7	T	2-Chloronaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	95-57-8	T	2-Chlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	91-57-6	T	2-Methylnaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	88-74-4	T	2-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	88-75-5	T	2-Nitrophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	9	T	3 & 4 Methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	91-94-1	T	3,3'-Dichlorobenzidine	19	U	19	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	99-09-2	T	3-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	72-54-8	T	4,4'-DDD	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	72-55-9	T	4,4'-DDE	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	50-29-3	T	4,4'-DDT	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	47	U	47	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	59-50-7	T	4-Chloro-3-methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	100-02-7	T	4-Nitrophenol	47	U	47	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	83-32-9	T	Acenaphthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	208-96-8	T	Acenaphthylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	67-64-1	T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	309-00-2	T	Aldrin	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	319-84-6	T	alpha-BHC	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	5103-71-9	T	alpha-Chlordane	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7429-90-5	T	Aluminum	2.6		0.2	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7429-90-5	D	Aluminum (Dissolved)	0.2	U	0.2	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	120-12-7	T	Anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-36-0	D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-38-2	T	Arsenic	0.0046	J	0.01	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-38-2	D	Arsenic (Dissolved)	0.0061	J	0.01	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-39-3	T	Barium	0.11		0.01	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-39-3	D	Barium (Dissolved)	0.075		0.01	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	71-43-2	T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	56-55-3	T	Benzo(a)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	50-32-8	T	Benzo(a)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	205-99-2	T	Benzo(b)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	191-24-2	T	Benzo(g,h,i)perylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	207-08-9	T	Benzo(k)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	85-68-7	T	Benzyl Butyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-41-7	D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	319-85-7	T	beta-BHC	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	111-44-4	T	bis(2-Chloroethyl)ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	75-25-2	T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	74-83-9	T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-43-9	D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-70-2	T	Calcium	46		0.5	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-70-2	D	Calcium (Dissolved)	43		0.5	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	86-74-8	T	Carbazole	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	75-00-3	T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	67-66-3	T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	74-87-3	T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-47-3	T	Chromium	0.0034	J	0.01	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-47-3	D	Chromium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	218-01-9	T	Chrysene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-48-4	T	Cobalt	0.0012	J	0.01	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-48-4	D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-50-8	T	Copper	0.0036	J	0.02	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-50-8	D	Copper (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	75-99-0	T	Dalapon	9.7	U	9.7	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	319-86-8	T	delta-BHC	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	53-70-3	T	Dibenzo(a,h)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	132-64-9	T	Dibenzofuran	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	1918-00-9	T	Dicamba	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	120-36-5	T	Dichlorprop	0.49	U	0.49	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	60-57-1	T	Dieldrin	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	84-66-2	T	Diethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	131-11-3	T	Dimethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	84-74-2	T	Di-n-butylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	117-84-0	T	Di-n-octylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	88-85-7	T	Dinoseb	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	959-98-8	T	Endosulfan I	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	9	T	Endosulfan II	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	1031-07-8	T	Endosulfan Sulfate	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	72-20-8	T	Endrin	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7421-93-4	T	Endrin Aldehyde	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	5	T	Endrin Ketone	0.095	UJ	0.095	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	206-44-0	T	Fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	86-73-7	T	Fluorene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	58-89-9	T	gamma-BHC (Lindane)	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	5103-74-2	T	gamma-Chlordane	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	76-44-8	T	Heptachlor	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	1024-57-3	T	Heptachlor Epoxide	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	118-74-1	T	Hexachlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	87-68-3	T	Hexachlorobutadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	77-47-4	T	Hexachlorocyclopentadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	67-72-1	T	Hexachloroethane	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7439-89-6	T	Iron	2.5		0.05	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7439-89-6	D	Iron (Dissolved)	0.05	U	0.05	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	78-59-1	T	Isophorone	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7439-92-1	T	Lead	0.0035	J	0.005	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7439-92-1	D	Lead (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7439-95-4	T	Magnesium	22		0.5	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7439-95-4	D	Magnesium (Dissolved)	20		0.5	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7439-96-5	T	Manganese	0.18		0.01	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7439-96-5	D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	93-65-2	T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7439-97-6	T	Mercury	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7439-97-6	D	Mercury (Dissolved)	0.0002	U	0.0002	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	72-43-5	T	Methoxychlor	0.48	UJ	0.48	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-PDA4		9/22/2005	Sample	91-20-3	T	Naphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-02-0	T	Nickel	0.0047	J	0.04	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-02-0	D	Nickel (Dissolved)	0.003	J	0.04	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	98-95-3	T	Nitrobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	86-30-6	T	N-Nitrosodiphenylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	106-47-8	T	P-Chloroaniline	19	U	19	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	87-86-5	T	Pentachlorophenol	0.24	U	0.24	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	85-01-8	T	Phenanthrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	108-95-2	T	Phenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	100-01-6	T	P-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-09-7	T	Potassium	5.5		1	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-09-7	D	Potassium (Dissolved)	4.8		1	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	129-00-0	T	Pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7782-49-2	T	Selenium	0.0097	U	0.01	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7782-49-2	D	Selenium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-22-4	D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-23-5	T	Sodium	34		1	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-23-5	D	Sodium (Dissolved)	33		1	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-28-0	T	Thallium	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-28-0	D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	108-88-3	T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	8001-35-2	T	Toxaphene	4.8	UJ	4.8	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	79-01-6	T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-62-2	T	Vanadium	0.009	J	0.01	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-62-2	D	Vanadium (Dissolved)	0.0034	J	0.01	mg/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-PDA4		9/22/2005	Sample	7440-66-6	T	Zinc	0.012	J	0.02	mg/L
SW-SA2-GMCS-PDA4	PDA4	9/22/2005	Sample	7440-66-6	D	Zinc (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	120-82-1	T	1,2,4-Trichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	95-50-1	T	1,2-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	541-73-1	T	1,3-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	106-46-7	T	1,4-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	93-76-5	T	2,4,5-T	0.49	U	0.49	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.49	U	0.49	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	95-95-4	T	2,4,5-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	88-06-2	T	2,4,6-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	94-75-7	T	2,4-D	1.2		0.49	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	94-82-6	T	2,4-DB	0.49	U	0.49	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	120-83-2	T	2,4-Dichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	105-67-9	T	2,4-Dimethylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	51-28-5	T	2,4-Dinitrophenol	47	U	47	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	121-14-2	T	2,4-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	606-20-2	T	2,6-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	91-58-7	T	2-Chloronaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	95-57-8	T	2-Chlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	91-57-6	T	2-Methylnaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	88-74-4	T	2-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	88-75-5	T	2-Nitrophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	9	T	3 & 4 Methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	91-94-1	T	3,3'-Dichlorobenzidine	19	U	19	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	99-09-2	T	3-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	72-54-8	T	4,4'-DDD	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	72-55-9	T	4,4'-DDE	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	50-29-3	T	4,4'-DDT	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	47	U	47	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	59-50-7	T	4-Chloro-3-methylphenol	9.4	U	9.4	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	100-02-7	T	4-Nitrophenol	47	U	47	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	83-32-9	T	Acenaphthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	208-96-8	T	Acenaphthylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	67-64-1	T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	309-00-2	T	Aldrin	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	319-84-6	T	alpha-BHC	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	5103-71-9	T	alpha-Chlordane	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7429-90-5	T	Aluminum	1.4		0.2	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7429-90-5	D	Aluminum (Dissolved)	0.2	U	0.2	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	120-12-7	T	Anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-36-0	D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-38-2	T	Arsenic	0.0066	J	0.01	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-38-2	D	Arsenic (Dissolved)	0.0077	J	0.01	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-39-3	T	Barium	0.088		0.01	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-39-3	D	Barium (Dissolved)	0.066		0.01	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	71-43-2	T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	56-55-3	T	Benzo(a)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	50-32-8	T	Benzo(a)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	205-99-2	T	Benzo(b)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	191-24-2	T	Benzo(g,h,i)perylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	207-08-9	T	Benzo(k)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	85-68-7	T	Benzyl Butyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-41-7	D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	319-85-7	T	beta-BHC	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	111-44-4	T	bis(2-Chloroethyl)ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	75-25-2	T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	74-83-9	T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-43-9	D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-70-2	T	Calcium	43		0.5	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-70-2	D	Calcium (Dissolved)	43		0.5	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	86-74-8	T	Carbazole	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	108-90-7	T	Chlorobenzene	0.57	J	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	75-00-3	T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	67-66-3	T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	74-87-3	T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-47-3	T	Chromium	0.0026	J	0.01	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-47-3	D	Chromium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	218-01-9	T	Chrysene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-48-4	T	Cobalt	0.0008	J	0.01	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-48-4	D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-50-8	T	Copper	0.0028	J	0.02	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-50-8	D	Copper (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	75-99-0	T	Dalapon	9.8	U	9.8	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	319-86-8	T	delta-BHC	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	53-70-3	T	Dibenzo(a,h)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	132-64-9	T	Dibenzofuran	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	1918-00-9	T	Dicamba	0.49	U	0.49	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	120-36-5	T	Dichlorprop	0.11	JP	0.49	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	60-57-1	T	Dieldrin	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	84-66-2	T	Diethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	131-11-3	T	Dimethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	84-74-2	T	Di-n-butylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	117-84-0	T	Di-n-octylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	88-85-7	T	Dinoseb	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	959-98-8	T	Endosulfan I	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	9	T	Endosulfan II	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	1031-07-8	T	Endosulfan Sulfate	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	72-20-8	T	Endrin	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7421-93-4	T	Endrin Aldehyde	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	5	T	Endrin Ketone	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-R3AM		9/21/2005	Sample	206-44-0	T	Fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	86-73-7	T	Fluorene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	58-89-9	T	gamma-BHC (Lindane)	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	5103-74-2	T	gamma-Chlordane	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	76-44-8	T	Heptachlor	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	1024-57-3	T	Heptachlor Epoxide	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	118-74-1	T	Hexachlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	87-68-3	T	Hexachlorobutadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	77-47-4	T	Hexachlorocyclopentadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	67-72-1	T	Hexachloroethane	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7439-89-6	T	Iron	1.6		0.05	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7439-89-6	D	Iron (Dissolved)	0.05	U	0.05	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	78-59-1	T	Isophorone	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7439-92-1	T	Lead	0.004	J	0.005	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7439-92-1	D	Lead (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7439-95-4	T	Magnesium	22		0.5	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7439-95-4	D	Magnesium (Dissolved)	22		0.5	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7439-96-5	T	Manganese	0.17		0.01	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7439-96-5	D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	93-65-2	T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7439-97-6	T	Mercury	0.0002	UJ	0.0002	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7439-97-6	D	Mercury (Dissolved)	0.0002	UJ	0.0002	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	72-43-5	T	Methoxychlor	0.48	U	0.48	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	91-20-3	T	Naphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-02-0	T	Nickel	0.003	J	0.04	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-02-0	D	Nickel (Dissolved)	0.04	U	0.04	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	98-95-3	T	Nitrobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	86-30-6	T	N-Nitrosodiphenylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	106-47-8	T	P-Chloroaniline	19	U	19	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	87-86-5	T	Pentachlorophenol	0.25	U	0.25	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	85-01-8	T	Phenanthrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	108-95-2	T	Phenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	100-01-6	T	P-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-09-7	T	Potassium	4.4		1	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-09-7	D	Potassium (Dissolved)	4.2		1	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	129-00-0	T	Pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7782-49-2	T	Selenium	0.012	U	0.01	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7782-49-2	D	Selenium (Dissolved)	0.0069	U	0.01	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-22-4	D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-23-5	T	Sodium	27		1	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-23-5	D	Sodium (Dissolved)	28		1	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-28-0	T	Thallium	0.01	J	0.025	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-28-0	D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	108-88-3	T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	8001-35-2	T	Toxaphene	4.8	U	4.8	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	79-01-6	T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-62-2	T	Vanadium	0.0064	J	0.01	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-62-2	D	Vanadium (Dissolved)	0.0032	J	0.01	mg/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-R3AM		9/21/2005	Sample	7440-66-6	T	Zinc	0.022		0.02	mg/L
SW-SA2-GMCS-R3AM	R3AM	9/21/2005	Sample	7440-66-6	D	Zinc (Dissolved)	0.0048	J	0.02	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	71-55-6	T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	79-34-5	T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	79-00-5	T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	75-34-3	T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	75-35-4	T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	120-82-1	T	1,2,4-Trichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	95-50-1	T	1,2-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	107-06-2	T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	540-59-0	T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	78-87-5	T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	541-73-1	T	1,3-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	106-46-7	T	1,4-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	93-76-5	T	2,4,5-T	0.49	U	0.49	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-R3BM		9/21/2005	Sample	93-72-1	T	2,4,5-TP (Silvex)	0.49	U	0.49	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	95-95-4	T	2,4,5-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	88-06-2	T	2,4,6-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	94-75-7	T	2,4-D	0.16	JP	0.49	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	94-82-6	T	2,4-DB	0.49	U	0.49	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	120-83-2	T	2,4-Dichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	105-67-9	T	2,4-Dimethylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	51-28-5	T	2,4-Dinitrophenol	47	U	47	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	121-14-2	T	2,4-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	606-20-2	T	2,6-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	78-93-3	T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	91-58-7	T	2-Chloronaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	95-57-8	T	2-Chlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	91-57-6	T	2-Methylnaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	95-48-7	T	2-Methylphenol (o-Cresol)	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	88-74-4	T	2-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	88-75-5	T	2-Nitrophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	9	T	3 & 4 Methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	91-94-1	T	3,3'-Dichlorobenzidine	19	U	19	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	99-09-2	T	3-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	72-54-8	T	4,4'-DDD	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	72-55-9	T	4,4'-DDE	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	50-29-3	T	4,4'-DDT	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	534-52-1	T	4,6-Dinitro-2-methylphenol	47	U	47	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	101-55-3	T	4-Bromophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	59-50-7	T	4-Chloro-3-methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7005-72-3	T	4-Chlorophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	108-10-1	T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	100-02-7	T	4-Nitrophenol	47	U	47	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	83-32-9	T	Acenaphthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	208-96-8	T	Acenaphthylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	67-64-1	T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	309-00-2	T	Aldrin	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	319-84-6	T	alpha-BHC	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	5103-71-9	T	alpha-Chlordane	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7429-90-5	T	Aluminum	1.3		0.2	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7429-90-5	D	Aluminum (Dissolved)	0.2	U	0.2	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	120-12-7	T	Anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-36-0	T	Antimony	0.02	U	0.02	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-36-0	D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-38-2	T	Arsenic	0.0063	J	0.01	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-38-2	D	Arsenic (Dissolved)	0.0043	J	0.01	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-39-3	T	Barium	0.084		0.01	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-39-3	D	Barium (Dissolved)	0.066		0.01	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	71-43-2	T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	56-55-3	T	Benzo(a)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	50-32-8	T	Benzo(a)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	205-99-2	T	Benzo(b)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	191-24-2	T	Benzo(g,h,i)perylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	207-08-9	T	Benzo(k)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	85-68-7	T	Benzyl Butyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-41-7	T	Beryllium	0.004	U	0.004	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-41-7	D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	319-85-7	T	beta-BHC	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	111-91-1	T	bis(2-Chloroethoxy)methane	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	111-44-4	T	bis(2-Chloroethyl)ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	117-81-7	T	bis(2-Ethylhexyl)phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	75-27-4	T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	75-25-2	T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	74-83-9	T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-43-9	T	Cadmium	0.005	U	0.005	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-43-9	D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-70-2	T	Calcium	44		0.5	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-70-2	D	Calcium (Dissolved)	42		0.5	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	86-74-8	T	Carbazole	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	75-15-0	T	Carbon Disulfide	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	56-23-5	T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	108-90-7	T	Chlorobenzene	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	124-48-1	T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	75-00-3	T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	67-66-3	T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	74-87-3	T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-47-3	T	Chromium	0.0021	J	0.01	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-47-3	D	Chromium (Dissolved)	0.01	U	0.01	mg/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-R3BM		9/21/2005	Sample	218-01-9	T	Chrysene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	5	T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-48-4	T	Cobalt	0.01	U	0.01	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-48-4	D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-50-8	T	Copper	0.0026	J	0.02	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-50-8	D	Copper (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	75-99-0	T	Dalapon	9.7	U	9.7	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	319-86-8	T	delta-BHC	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	53-70-3	T	Dibenzo(a,h)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	132-64-9	T	Dibenzofuran	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	1918-00-9	T	Dicamba	0.49	U	0.49	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	75-09-2	T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	120-36-5	T	Dichlorprop	0.49	U	0.49	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	60-57-1	T	Dieldrin	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	84-66-2	T	Diethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	131-11-3	T	Dimethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	84-74-2	T	Di-n-butylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	117-84-0	T	Di-n-octylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	88-85-7	T	Dinoseb	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	959-98-8	T	Endosulfan I	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	9	T	Endosulfan II	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	1031-07-8	T	Endosulfan Sulfate	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	72-20-8	T	Endrin	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7421-93-4	T	Endrin Aldehyde	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	5	T	Endrin Ketone	0.095	U	0.095	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	100-41-4	T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	206-44-0	T	Fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	86-73-7	T	Fluorene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	58-89-9	T	gamma-BHC (Lindane)	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	5103-74-2	T	gamma-Chlordane	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	76-44-8	T	Heptachlor	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	1024-57-3	T	Heptachlor Epoxide	0.048	U	0.048	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	118-74-1	T	Hexachlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	87-68-3	T	Hexachlorobutadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	77-47-4	T	Hexachlorocyclopentadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	67-72-1	T	Hexachloroethane	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	193-39-5	T	Indeno(1,2,3-cd)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7439-89-6	T	Iron	1.4		0.05	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7439-89-6	D	Iron (Dissolved)	0.05	U	0.05	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	78-59-1	T	Isophorone	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7439-92-1	T	Lead	0.0033	J	0.005	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7439-92-1	D	Lead (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7439-95-4	T	Magnesium	22		0.5	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7439-95-4	D	Magnesium (Dissolved)	21		0.5	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7439-96-5	T	Manganese	0.15		0.01	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7439-96-5	D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	93-65-2	T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7439-97-6	T	Mercury	0.0002	UJ	0.0002	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7439-97-6	D	Mercury (Dissolved)	0.0002	UJ	0.0002	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	72-43-5	T	Methoxychlor	0.48	U	0.48	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	591-78-6	T	Methyl N-Butyl Ketone	10	U	10	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	91-20-3	T	Naphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-02-0	T	Nickel	0.0034	J	0.04	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-02-0	D	Nickel (Dissolved)	0.0021	J	0.04	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	98-95-3	T	Nitrobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	621-64-7	T	N-Nitroso-di-n-propylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	86-30-6	T	N-Nitrosodiphenylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	106-47-8	T	P-Chloroaniline	19	U	19	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	87-86-5	T	Pentachlorophenol	0.24	U	0.24	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	85-01-8	T	Phenanthrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	108-95-2	T	Phenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	100-01-6	T	P-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-09-7	T	Potassium	4.5		1	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-09-7	D	Potassium (Dissolved)	4.2		1	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	129-00-0	T	Pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7782-49-2	T	Selenium	0.0066	U	0.01	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7782-49-2	D	Selenium (Dissolved)	0.0068	U	0.01	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-22-4	T	Silver	0.01	U	0.01	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-22-4	D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-23-5	T	Sodium	28		1	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-23-5	D	Sodium (Dissolved)	28		1	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	100-42-5	T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	127-18-4	T	Tetrachloroethene	1	U	1	ug/L

Appendix II-C2
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2005.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-28-0	T	Thallium	0.025	U	0.025	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-28-0	D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	108-88-3	T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	8001-35-2	T	Toxaphene	4.8	U	4.8	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	6	T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	79-01-6	T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-62-2	T	Vanadium	0.0059	J	0.01	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-62-2	D	Vanadium (Dissolved)	0.0031	J	0.01	mg/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	75-01-4	T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	1330-20-7	T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-R3BM		9/21/2005	Sample	7440-66-6	T	Zinc	0.022		0.02	mg/L
SW-SA2-GMCS-R3BM	R3BM	9/21/2005	Sample	7440-66-6	D	Zinc (Dissolved)	0.0049	J	0.02	mg/L

Appendix II-C3

Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2007

Appendix II-C3
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-9		3/20/2007	Sample		T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	1,2,4-Trichlorobenzene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	1,2-Dichlorobenzene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	1,3-Dichlorobenzene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	1,4-Dichlorobenzene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2,4,5-T	0.5	U	0.5	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2,4,5-Trichlorophenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2,4,6-Trichlorophenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2,4-D	0.5	U	0.5	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2,4-DB	0.5	U	0.5	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2,4-Dichlorophenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2,4-Dimethylphenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2,4-Dinitrophenol	49	U	49	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2,4-Dinitrotoluene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2,6-Dinitrotoluene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2-Chloronaphthalene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2-Chlorophenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2-Methylnaphthalene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2-Methylphenol (o-Cresol)	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2-Nitroaniline	49	U	49	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	2-Nitrophenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	3 & 4 Methylphenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	3,3'-Dichlorobenzidine	19	U	19	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	3-Nitroaniline	49	U	49	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	4,4'-DDD	0.097	UJ	0.097	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	4,4'-DDE	0.097	UJ	0.097	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	4,4'-DDT	0.097	UJ	0.097	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	4,6-Dinitro-2-methylphenol	49	U	49	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	4-Bromophenyl Phenyl Ether	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	4-Chloro-3-methylphenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	4-Chlorophenyl Phenyl Ether	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	4-Nitrophenol	49	U	49	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Acenaphthene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Acenaphthylene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Aldrin	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	alpha-BHC	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	alpha-Chlordane	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Aluminum (Dissolved)	0.03	J	0.2	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Anthracene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Arsenic (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Barium (Dissolved)	0.065		0.01	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Benzo(a)anthracene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Benzo(a)pyrene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Benzo(b)fluoranthene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Benzo(g,h,i)perylene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Benzo(k)fluoranthene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Benzyl Butyl Phthalate	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	beta-BHC	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	bis(2-Chloroethoxy)methane	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	bis(2-Chloroethyl)ether	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	bis(2-Ethylhexyl)phthalate	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Calcium (Dissolved)	59	B	0.5	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Carbazole	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Carbon Dioxide	46	J N B		ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Carbon Disulfide	2	U	2	ug/L

Appendix II-C3
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-9		3/20/2007	Sample		T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Chlorobenzene	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Chromium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Chrysene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	cis-1,2-Dichloroethene	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Copper (Dissolved)	0.0039	U	0.02	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Dalapon	10	U	10	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	delta-BHC	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Dibenzo(a,h)anthracene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Dibenzofuran	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Dicamba	0.5	U	0.5	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Dichlorprop	0.095	JP	0.5	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Dieldrin	0.097	UJ	0.097	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Diethyl Phthalate	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Dimethyl Phthalate	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Di-n-butylphthalate	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Di-n-octylphthalate	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Dinoseb	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Endosulfan I	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Endosulfan II	0.097	UJ	0.097	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Endosulfan Sulfate	0.097	UJ	0.097	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Endrin	0.097	UJ	0.097	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Endrin Aldehyde	0.097	UJ	0.097	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Endrin Ketone	0.097	UJ	0.097	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Fluoranthene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Fluorene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	gamma-BHC (Lindane)	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	gamma-Chlordane	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Heptachlor	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Heptachlor Epoxide	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Hexachlorobenzene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Hexachlorobutadiene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Hexachlorocyclopentadiene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Hexachloroethane	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Indeno(1,2,3-cd)pyrene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Iron (Dissolved)	0.092		0.05	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Isophorone	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Lead (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Magnesium (Dissolved)	21		0.5	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Mercury (Dissolved)	0.0002	UJ	0.0002	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Methoxychlor	0.49	UJ	0.49	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Methyl N-Butyl Ketone	10	U	10	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Naphthalene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Nickel (Dissolved)	0.0027	J	0.04	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Nitrobenzene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	N-Nitroso-di-n-propylamine	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	N-Nitrosodiphenylamine	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	P-Chloroaniline	19	U	19	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Pentachlorophenol	0.25	U	0.25	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Phenanthrene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Phenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	P-Nitroaniline	49	U	49	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Potassium (Dissolved)	4.5		1	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Pyrene	9.7	U	9.7	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Selenium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Sodium (Dissolved)	34		1	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Toxaphene	4.9	UJ	4.9	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	trans-1,2-Dichloroethene	1	U	1	ug/L

Appendix II-C3
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-9		3/20/2007	Sample		T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Vanadium (Dissolved)	0.0022	J	0.01	mg/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-9		3/20/2007	Sample		D	Zinc (Dissolved)	0.0063	U	0.02	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	1,2,4-Trichlorobenzene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	1,2-Dichlorobenzene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	1,3-Dichlorobenzene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	1,4-Dichlorobenzene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2,4,5-T	0.49	U	0.49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2,4,5-TP (Silvex)	0.49	U	0.49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2,4,5-Trichlorophenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2,4,6-Trichlorophenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2,4-D	0.49	U	0.49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2,4-DB	0.49	U	0.49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2,4-Dichlorophenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2,4-Dimethylphenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2,4-Dinitrophenol	49	U	49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2,4-Dinitrotoluene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2,6-Dinitrotoluene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2-Chloronaphthalene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2-Chlorophenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2-Methylnaphthalene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2-Methylphenol (o-Cresol)	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2-Nitroaniline	49	U	49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	2-Nitrophenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	3 & 4 Methylphenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	3,3'-Dichlorobenzidine	19	U	19	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	3-Nitroaniline	49	U	49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	4,4'-DDD	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	4,4'-DDE	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	4,4'-DDT	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	4,6-Dinitro-2-methylphenol	49	U	49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	4-Bromophenyl Phenyl Ether	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	4-Chloro-3-methylphenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	4-Chlorophenyl Phenyl Ether	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	4-Nitrophenol	49	U	49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Acenaphthene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Acenaphthylene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Aldrin	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	alpha-BHC	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	alpha-Chlordane	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Aluminum (Dissolved)	0.2	UJ	0.2	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Anthracene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Arsenic (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Barium (Dissolved)	0.066		0.01	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Benzo(a)anthracene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Benzo(a)pyrene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Benzo(b)fluoranthene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Benzo(g,h,i)perylene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Benzo(k)fluoranthene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Benzyl Butyl Phthalate	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	beta-BHC	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	bis(2-Chloroethoxy)methane	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	bis(2-Chloroethyl)ether	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	bis(2-Ethylhexyl)phthalate	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Bromoform	1	U	1	ug/L

Appendix II-C3
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-5		3/20/2007	Sample		T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Calcium (Dissolved)	59	B	0.5	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Carbazole	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Carbon Dioxide	44	J N B		ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Carbon Disulfide	2	U	2	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Chlorobenzene	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Chromium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Chrysene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	cis-1,2-Dichloroethene	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Copper (Dissolved)	0.0037	U	0.02	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Dalapon	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	delta-BHC	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Dibenzo(a,h)anthracene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Dibenzofuran	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Dicamba	0.49	U	0.49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Dichlorprop	0.11	JP	0.49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Dieldrin	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Diethyl Phthalate	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Dimethyl Phthalate	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Di-n-butylphthalate	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Di-n-octylphthalate	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Dinoseb	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Endosulfan I	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Endosulfan II	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Endosulfan Sulfate	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Endrin	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Endrin Aldehyde	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Endrin Ketone	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Fluoranthene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Fluorene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	gamma-BHC (Lindane)	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	gamma-Chlordane	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Heptachlor	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Heptachlor Epoxide	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Hexachlorobenzene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Hexachlorobutadiene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Hexachlorocyclopentadiene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Hexachloroethane	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Indeno(1,2,3-cd)pyrene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Iron (Dissolved)	0.032	J	0.05	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Isophorone	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Lead (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Magnesium (Dissolved)	21		0.5	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Mercury (Dissolved)	0.0002	UJ	0.0002	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Methoxychlor	0.49	UJ	0.49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Methyl N-Butyl Ketone	10	U	10	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Naphthalene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Nickel (Dissolved)	0.04	U	0.04	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Nitrobenzene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	N-Nitroso-di-n-propylamine	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	N-Nitrosodiphenylamine	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	P-Chloroaniline	19	U	19	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Pentachlorophenol	0.24	U	0.24	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Phenanthrene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Phenol	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	P-Nitroaniline	49	U	49	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Potassium (Dissolved)	4.6		1	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Pyrene	9.7	U	9.7	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Selenium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Sodium (Dissolved)	34		1	mg/L

Appendix II-C3
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-5		3/20/2007	Sample		T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Toxaphene	4.9	UJ	4.9	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	trans-1,2-Dichloroethene	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Vanadium (Dissolved)	0.0023	J	0.01	mg/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-5		3/20/2007	Sample		D	Zinc (Dissolved)	0.0068	U	0.02	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	(Carbethoxyethylidine)triphenylphosphora	14	J N		ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	1,2,4-Trichlorobenzene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	1,2-Dichlorobenzene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	1,3-Dichlorobenzene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	1,4-Dichlorobenzene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2,4,5-T	0.5	U	0.5	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2,4,5-TP (Silvex)	0.5	U	0.5	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2,4,5-Trichlorophenol	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2,4,6-Trichlorophenol	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2,4-D	0.5	U	0.5	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2,4-DB	0.5	U	0.5	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2,4-Dichlorophenol	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2,4-Dimethylphenol	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2,4-Dinitrophenol	48	U	48	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2,4-Dinitrotoluene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2,6-Dinitrotoluene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2-Chloronaphthalene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2-Chlorophenol	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2-Methylnaphthalene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2-Methylphenol (o-Cresol)	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2-Nitroaniline	48	U	48	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	2-Nitrophenol	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	3 & 4 Methylphenol	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	3,3'-Dichlorobenzidine	19	U	19	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	3-Nitroaniline	48	U	48	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	4,4'-DDD	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	4,4'-DDE	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	4,4'-DDT	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	4,6-Dinitro-2-methylphenol	48	U	48	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	4-Bromophenyl Phenyl Ether	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	4-Chloro-3-methylphenol	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	4-Chlorophenyl Phenyl Ether	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	4-Nitrophenol	48	U	48	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Acenaphthene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Acenaphthylene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Aldrin	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	alpha-BHC	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	alpha-Chlordane	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Aluminum (Dissolved)	0.2	UJ	0.2	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Anthracene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Arsenic (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Barium (Dissolved)	0.065		0.01	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Benzo(a)anthracene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Benzo(a)pyrene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Benzo(b)fluoranthene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Benzo(g,h,i)perylene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Benzo(k)fluoranthene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Benzyl Butyl Phthalate	9.6	U	9.6	ug/L

Appendix II-C3
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-2		3/21/2007	Sample		D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	beta-BHC	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	bis(2-Chloroethoxy)methane	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	bis(2-Chloroethyl)ether	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	bis(2-Ethylhexyl)phthalate	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Calcium (Dissolved)	58	B	0.5	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Carbazole	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Carbon Dioxide	47	J N B		ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Carbon Disulfide	2	U	2	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Chlorobenzene	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Chromium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Chrysene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	cis-1,2-Dichloroethene	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Copper (Dissolved)	0.0036	U	0.02	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Dalapon	9.9	U	9.9	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	delta-BHC	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Dibenzo(a,h)anthracene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Dibenzofuran	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Dicamba	0.5	U	0.5	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Dichlorprop	0.11	JP	0.5	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Dieldrin	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Diethyl Phthalate	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Dimethyl Phthalate	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Di-n-butylphthalate	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Di-n-octylphthalate	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Dinoseb	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Endosulfan I	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Endosulfan II	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Endosulfan Sulfate	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Endrin	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Endrin Aldehyde	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Endrin Ketone	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Fluoranthene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Fluorene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	gamma-BHC (Lindane)	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	gamma-Chlordane	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Heptachlor	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Heptachlor Epoxide	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Hexachlorobenzene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Hexachlorobutadiene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Hexachlorocyclopentadiene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Hexachloroethane	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Indeno(1,2,3-cd)pyrene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Iron (Dissolved)	0.03	J	0.05	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Isophorone	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Lead (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Magnesium (Dissolved)	21		0.5	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Mercury (Dissolved)	0.0002	UJ	0.0002	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Methoxychlor	0.49	UJ	0.49	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Methyl N-Butyl Ketone	10	U	10	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Naphthalene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Nickel (Dissolved)	0.04	U	0.04	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Nitrobenzene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	N-Nitroso-di-n-propylamine	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	N-Nitrosodiphenylamine	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Octadecanoic acid, butyl ester	7.7	J N		ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	P-Chloroaniline	19	U	19	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Pentachlorophenol	0.25	U	0.25	ug/L

Appendix II-C3
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-2		3/21/2007	Sample		T	Phenanthrene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Phenol	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	P-Nitroaniline	48	U	48	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Potassium (Dissolved)	4.5		1	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Pyrene	9.6	U	9.6	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Selenium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Sodium (Dissolved)	32		1	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Toxaphene	4.9	UJ	4.9	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	trans-1,2-Dichloroethene	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Vanadium (Dissolved)	0.002	J	0.01	mg/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-2		3/21/2007	Sample		D	Zinc (Dissolved)	0.0055	U	0.02	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	(Carbethoxyethylidine)triphenylphosphora	14	J N		ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	1,2,4-Trichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	1,2-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	1,3-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	1,4-Dichlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2,4,5-T	0.49	U	0.49	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2,4,5-TP (Silvex)	0.49	U	0.49	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2,4,5-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2,4,6-Trichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2,4-D	0.49	U	0.49	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2,4-DB	0.49	U	0.49	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2,4-Dichlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2,4-Dimethylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2,4-Dinitrophenol	47	U	47	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2,4-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2,6-Dinitrotoluene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2-Chloronaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2-Chlorophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2-Methylnaphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2-Methylphenol (o-Cresol)	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	2-Nitrophenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	3 & 4 Methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	3,3'-Dichlorobenzidine	19	U	19	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	3-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	4,4'-DDD	0.096	UJ	0.096	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	4,4'-DDE	0.096	UJ	0.096	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	4,4'-DDT	0.096	UJ	0.096	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	4,6-Dinitro-2-methylphenol	47	U	47	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	4-Bromophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	4-Chloro-3-methylphenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	4-Chlorophenyl Phenyl Ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	4-Nitrophenol	47	U	47	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Acenaphthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Acenaphthylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Acetone	25	U	25	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Aldrin	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	alpha-BHC	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	alpha-Chlordane	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Aluminum (Dissolved)	0.2	UJ	0.2	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Arsenic (Dissolved)	0.01	U	0.01	mg/L

Appendix II-C3
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-3		3/21/2007	Sample		D	Barium (Dissolved)	0.064		0.01	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Benzo(a)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Benzo(a)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Benzo(b)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Benzo(g,h,i)perylene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Benzo(k)fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Benzyl Butyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	beta-BHC	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	bis(2-Chloroethoxy)methane	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	bis(2-Chloroethyl)ether	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	bis(2-Ethylhexyl)phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Calcium (Dissolved)	58	B	0.5	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Carbazole	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Carbon Dioxide	47	N J B		ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Carbon Disulfide	2	U	2	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Chlorobenzene	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Chromium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Chrysene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	cis-1,2-Dichloroethene	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Copper (Dissolved)	0.0036	U	0.02	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Dalapon	9.8	U	9.8	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	delta-BHC	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Dibenzo(a,h)anthracene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Dibenzofuran	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Dicamba	0.49	U	0.49	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Dichlorprop	0.12	JP	0.49	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Dieldrin	0.096	UJ	0.096	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Diethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Dimethyl Phthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Di-n-butylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Di-n-octylphthalate	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Dinoseb	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Endosulfan I	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Endosulfan II	0.096	UJ	0.096	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Endosulfan Sulfate	0.096	UJ	0.096	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Endrin	0.096	UJ	0.096	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Endrin Aldehyde	0.096	UJ	0.096	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Endrin Ketone	0.096	UJ	0.096	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Fluoranthene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Fluorene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	gamma-BHC (Lindane)	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	gamma-Chlordane	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Heptachlor	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Heptachlor Epoxide	0.048	UJ	0.048	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Hexachlorobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Hexachlorobutadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Hexachlorocyclopentadiene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Hexachloroethane	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Indeno(1,2,3-cd)pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Iron (Dissolved)	0.033	J	0.05	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Isophorone	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Lead (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Magnesium (Dissolved)	21		0.5	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Mercury (Dissolved)	0.0002	UJ	0.0002	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Methoxychlor	0.48	UJ	0.48	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Methyl N-Butyl Ketone	10	U	10	ug/L

Appendix II-C3
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-3		3/21/2007	Sample		T	Naphthalene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Nickel (Dissolved)	0.04	U	0.04	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Nitrobenzene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	N-Nitroso-di-n-propylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	N-Nitrosodiphenylamine	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	P-Chloroaniline	19	U	19	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Pentachlorophenol	0.25	U	0.25	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Phenanthrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Phenol	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	P-Nitroaniline	47	U	47	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Potassium (Dissolved)	4.5		1	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Pyrene	9.4	U	9.4	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Selenium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Sodium (Dissolved)	32		1	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Toxaphene	4.8	UJ	4.8	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	trans-1,2-Dichloroethene	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Vanadium (Dissolved)	0.0026	J	0.01	mg/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-3		3/21/2007	Sample		D	Zinc (Dissolved)	0.005	U	0.02	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	(Carbethoxyethylidine)triphenylphosphora	16	J N		ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	1,1,1-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	1,1,2,2-Tetrachloroethane	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	1,1,2-Trichloroethane	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	1,1-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	1,1-Dichloroethylene	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	1,2,4-Trichlorobenzene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	1,2-Dichlorobenzene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	1,2-Dichloroethane	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	1,2-Dichloroethene (total)	2	U	2	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	1,2-Dichloropropane	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	1,3-Dichlorobenzene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	1,4-Dichlorobenzene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2,4,5-T	0.49	U	0.49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2,4,5-TP (Silvex)	0.49	U	0.49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2,4,5-Trichlorophenol	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2,4,6-Trichlorophenol	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2,4-D	0.49	U	0.49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2,4-DB	0.49	U	0.49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2,4-Dichlorophenol	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2,4-Dimethylphenol	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2,4-Dinitrophenol	49	U	49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2,4-Dinitrotoluene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2,6-Dinitrotoluene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2-Butanone (MEK)	10	U	10	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2-Chloronaphthalene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2-Chlorophenol	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2-Methylnaphthalene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2-Methylphenol (o-Cresol)	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2-Nitroaniline	49	U	49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	2-Nitrophenol	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	3 & 4 Methylphenol	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	3,3'-Dichlorobenzidine	20	U	20	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	3-Nitroaniline	49	U	49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	4,4'-DDD	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	4,4'-DDE	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	4,4'-DDT	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	4,6-Dinitro-2-methylphenol	49	U	49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	4-Bromophenyl Phenyl Ether	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	4-Chloro-3-methylphenol	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	4-Chlorophenyl Phenyl Ether	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	4-Nitrophenol	49	U	49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Acenaphthene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Acenaphthylene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Acetone	25	U	25	ug/L

Appendix II-C3
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-4		3/21/2007	Sample		T	Aldrin	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	alpha-BHC	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	alpha-Chlordane	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Aluminum (Dissolved)	0.2	UJ	0.2	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Anthracene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Antimony (Dissolved)	0.02	U	0.02	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Arsenic (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Barium (Dissolved)	0.066		0.01	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Benzene	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Benzo(a)anthracene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Benzo(a)pyrene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Benzo(b)fluoranthene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Benzo(g,h,i)perylene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Benzo(k)fluoranthene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Benzyl Butyl Phthalate	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Beryllium (Dissolved)	0.004	U	0.004	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	beta-BHC	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	bis(2-Chloroethoxy)methane	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	bis(2-Chloroethyl)ether	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	bis(2-Ethylhexyl)phthalate	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Bromodichloromethane	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Bromoform	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Bromomethane	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Cadmium (Dissolved)	0.005	U	0.005	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Calcium (Dissolved)	58	B	0.5	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Carbazole	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Carbon Dioxide	42	J N B		ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Carbon Disulfide	2	U	2	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Carbon Tetrachloride	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Chlorobenzene	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Chlorodibromomethane	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Chloroethane	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Chloroform	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Chloromethane	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Chromium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Chrysene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	cis-1,2-Dichloroethene	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	cis-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Cobalt (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Copper (Dissolved)	0.0038	U	0.02	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Dalapon	9.7	U	9.7	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	delta-BHC	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Dibenzo(a,h)anthracene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Dibenzofuran	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Dicamba	0.49	U	0.49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Dichloromethane	5	U	5	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Dichlorprop	0.16	JP	0.49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Dieldrin	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Diethyl Phthalate	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Dimethyl Phthalate	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Di-n-butylphthalate	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Di-n-octylphthalate	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Dinoseb	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Endosulfan I	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Endosulfan II	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Endosulfan Sulfate	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Endrin	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Endrin Aldehyde	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Endrin Ketone	0.098	UJ	0.098	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Ethylbenzene	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Fluoranthene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Fluorene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	gamma-BHC (Lindane)	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	gamma-Chlordane	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Heptachlor	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Heptachlor Epoxide	0.049	UJ	0.049	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Hexachlorobenzene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Hexachlorobutadiene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Hexachlorocyclopentadiene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Hexachloroethane	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Indeno(1,2,3-cd)pyrene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Iron (Dissolved)	0.038	J	0.05	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Isophorone	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Lead (Dissolved)	0.005	U	0.005	mg/L

Appendix II-C3
Results of Chemical Analysis of Surface Water Sampled from Mississippi River near Sauget Area 2 Sites in 2007.

Field Sample ID	Parent Sample	Sample Date	Sample Type	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
SW-SA2-GMCS-4		3/21/2007	Sample		D	Magnesium (Dissolved)	21		0.5	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Manganese (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	U	120	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	MCPP	120	U	120	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Mercury (Dissolved)	0.0002	UJ	0.0002	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Methoxychlor	0.49	UJ	0.49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Methyl N-Butyl Ketone	10	U	10	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Naphthalene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Nickel (Dissolved)	0.0021	J	0.04	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Nitrobenzene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	N-Nitroso-di-n-propylamine	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	N-Nitrosodiphenylamine	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	P-Chloroaniline	20	U	20	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Pentachlorophenol	0.24	U	0.24	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Phenanthrene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Phenol	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	P-Nitroaniline	49	U	49	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Potassium (Dissolved)	4.6		1	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Pyrene	9.8	U	9.8	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Selenium (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Silver (Dissolved)	0.01	U	0.01	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Sodium (Dissolved)	32		1	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Styrene (Monomer)	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Tetrachloroethene	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Thallium (Dissolved)	0.025	U	0.025	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Toluene	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Toxaphene	4.9	UJ	4.9	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	trans-1,2-Dichloroethene	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	trans-1,3-Dichloropropene	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Trichloroethene	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Vanadium (Dissolved)	0.0023	J	0.01	mg/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Vinyl chloride	1	U	1	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		T	Xylenes, Total	2	U	2	ug/L
SW-SA2-GMCS-4		3/21/2007	Sample		D	Zinc (Dissolved)	0.0059	U	0.02	mg/L

Appendix II-D

Experimental Methods for Bioassay and Bioaccumulation Testing

CERIODAPHNIA DUBIA 7-DAY CHRONIC SURVIVAL AND REPRODUCTION TEST EXPOSURES

METHODS AND MATERIALS

Sample Collection and Transport

AMEC personnel collected water samples between 6 and 18 November 2002. Following collection, samples were placed in 20-liter (L) plastic cubitainers and sealed to minimize headspace. Containers were then placed in ice chests with wet ice, and transported to the laboratory by overnight delivery service. These samples were received at the laboratory between 7 and 19 November 2002. Samples were identified as shown in Table 1. Appropriate chain-of-custody procedures were employed throughout collection and transport.

Organism Procurement and Handling

The freshwater cladoceran *Ceriodaphnia dubia* was used for this test. Four to five days prior to test initiation, adult female daphnids were isolated from internal batch cultures and placed in individual holding cups. The number of daphnids isolated was equal to the number of neonates required to initiate testing. Each cup contained 15 milliliters (ml) of dilution water. A diet consisting of a vitamin-enriched mixture of yeast, Cerophyll®, and trout chow (YCT) and *Selenastrum* was added to each cup daily. Cups were held in a plexiglass board and the entire board was placed in a environmentally-controlled room maintained at 25±1 degrees Celsius (°C). Isolated females were transferred to cups containing fresh lab water every 48 hours and 24 hours prior to test initiation. Gravid females producing more than 8 neonates were isolated from the brood boards. Newly hatched (<24 hours old) *C. dubia* were collected and transferred to a 500-ml glass petri bowl. Neonates were collected using a 1-ml polypropylene pipette with the end cut off in order to obtain a wide bore. A mixture of vitamin-enriched YCT and *Selenastrum* was added to the holding bowl two hours prior to neonate addition to the test chambers.

Table 1. Water Samples Received and Test Initation Dates
***Ceriodaphnia* 7-Day Chronic**
AMEC - Sauget

Sample ID	Date Collected	Test Initiation Date
R6AU1W	11/6/02	11/12/02
R6AD1W	11/6/02	11/12/02
R6BU1W	11/6/02	11/12/02
R6BM1W	11/7/02	11/12/02
R6CM1W	11/7/02	11/12/02
R5AD1W	11/7/02	11/12/02
R6AM2W	11/7/02	11/12/02
R6AM1W	11/7/02	11/12/02
R5AM1W	11/8/02	11/12/02
R5AU1W	11/8/02	11/12/02
R5BD1W	11/8/02	11/12/02
R5BU1W	11/9/02	11/12/02
R5BM1W	11/9/02	11/12/02
R5CM1W	11/9/02	11/12/02
R4CM2W	11/11/02	11/15/02
R4BD1W	11/10/02	11/15/02
R4AU1W	11/11/02	11/15/02
R4BM1W	11/11/02	11/15/02
R4AM1W	11/10/02	11/15/02
R4BU1W	11/11/02	11/15/02
R4AD1W	11/10/02	11/15/02
R4CM1W	11/11/02	11/15/02
R3AM1W	11/12/02	11/20/02
R3AD1W	11/12/02	11/20/02
R3BD1W	11/12/02	11/20/02
R3BM1W	11/12/02	11/20/02
R2BD1W	11/13/02	11/20/02
R3CM1W	11/13/02	11/20/02
R2AD1W	11/13/02	11/20/02
R3AU1W	11/13/02	11/20/02
R3BU1W	11/13/02	11/20/02
R2AM2W	11/14/02	11/20/02
R2BM1W	11/14/02	11/20/02
R2CM1W	11/14/02	11/20/02
R2AU1W	11/14/02	11/20/02
R2AM1W	11/14/02	11/20/02
R1AU1W	11/16/02	11/26/02
R1AD1W	11/15/02	11/26/02
R1BM2W	11/16/02	11/26/02
R1CM1W	11/16/02	11/26/02
R1AM1W	11/15/02	11/26/02
R2BU1W	11/15/02	11/26/02
R1BD1W	11/15/02	11/26/02
R1BM1W	11/16/02	11/26/02
R5BN1W	11/17/02	11/26/02
P11W	11/18/02	11/26/02
R1BU1W	11/17/02	11/26/02
R5AN1W	11/17/02	11/26/02
P12W	11/18/02	11/26/02

Bioassay Protocol

Bioassays were conducted in accordance with U.S. Environmental Protection Agency (EPA) protocols outlined in "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" (1989).

Test Procedure

Ceriodaphnia dubia were exposed to samples for 7 days to determine the effects of the sample on survival and reproduction. Each sample was tested using undiluted sample along with a lab control. Laboratory water consisted of 8 parts nanopure water and 2 parts Perrier® bottled water aerated overnight. The pH, hardness, and alkalinity of the laboratory water were measured and recorded daily to ensure that they were within the range designated in the protocol. The test was conducted in an environmental chamber maintained at 25 ± 1ºC under a 16-hour (light): 8-hour (dark) light cycle. The experimental design consisted of one daphnid neonate randomly distributed into one of ten replicate 30-ml polystyrene cups per sample. Fifteen ml of test solution was distributed to each exposure chamber. During the test period, each test chamber was monitored daily for mortality and reproduction. Dead animals, if any, were removed from the test chambers during daily observations. A renewal of the test solutions was performed daily by transferring the adult daphnid from each replicate into a new test chamber containing fresh test solution. Organisms were fed daily at renewal with YTC. Measurements of pH, DO, temperature, and conductivity were recorded daily in a composite of each sample.

Final survival, reproduction, and water quality data were reviewed throughout testing and following termination in accordance with our Quality Assurance/Quality Control Plan. Mean acute survival (48 hours), chronic survival (7 days), and reproduction data were calculated and reported under separate cover.

References

U.S. Environmental Protection Agency (EPA). 1989. "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms". EPA/600/4-89/001.

PIMEPHALES PROMELAS 7-DAY CHRONIC SURVIVAL AND GROWTH TEST EXPOSURES

METHODS AND MATERIALS

Sample Collection and Transport

AMEC personnel collected water samples between 6 and 18 November 2002. Following collection, samples were placed in 20-liter (L) plastic cubitainers and sealed to minimize headspace. Containers were then placed in ice chests with wet ice, and transported to AMEC's San Diego Bioassay Laboratory by overnight delivery service. These samples were received at the laboratory between 7 and 19 November 2002. Samples were identified as shown in Table 1. Appropriate chain-of-custody procedures were employed throughout collection and transport.

Organism Procurement and Handling

Test specimens (*Pimephales promelas*) were obtained on multiple dates to meet the age requirements of the assay. For all testing, animals were obtained from Aquatic BioSystems in Fort Collins, Colorado. Upon receipt the fish were less than 24 hours old. An insulated ice chest containing the organisms was shipped by overnight delivery service. Upon arrival at the laboratory, organism receipt information was recorded, animal condition specified, and physical parameters including pH, DO, conductivity, and temperature were measured. The organisms were acclimated to test conditions in order to promote and confirm animal health prior to test initiation. During these acclimation periods, the animals were observed for any indications of stress or significant mortality. Observed mortality is monitored and recorded in animal holding logbooks. Mortality is considered significant if it is greater than 10 percent during the holding and acclimation period. Obvious indications of stress include abnormal swimming behavior, discoloration, and mortality.

Bioassay Protocol

Bioassays were conducted in accordance with U.S. Environmental Protection Agency (EPA) protocols outlined in "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" (1989).

Table 1. Water Samples Received and Test Initation Dates
***Pimephales* 7-Day Chronic**
AMEC - Sauget

Sample ID	Date Collected	Test Initiation Date
R6AU1W	11/6/02	11/22/02
R6AD1W	11/6/02	11/22/02
R6BU1W	11/6/02	11/22/02
R6BM1W	11/7/02	11/22/02
R6CM1W	11/7/02	11/22/02
R5AD1W	11/7/02	11/22/02
R6AM2W	11/7/02	11/22/02
R6AM1W	11/7/02	11/22/02
R5AM1W	11/8/02	11/22/02
R5AU1W	11/8/02	11/22/02
R5BD1W	11/8/02	11/22/02
R5BU1W	11/9/02	11/22/02
R5BM1W	11/9/02	11/22/02
R5CM1W	11/9/02	11/22/02
R4CM2W	11/11/02	11/20/02
R4BD1W	11/10/02	11/20/02
R4AU1W	11/11/02	11/20/02
R4BM1W	11/11/02	11/20/02
R4AM1W	11/10/02	11/20/02
R4BU1W	11/11/02	11/20/02
R4AD1W	11/10/02	11/20/02
R4CM1W	11/11/02	11/20/02
R3AM1W	11/12/02	11/26/02
R3AD1W	11/12/02	11/26/02
R3BD1W	11/12/02	11/26/02
R3BM1W	11/12/02	11/26/02
R2BD1W	11/13/02	11/20/02
R3CM1W	11/13/02	11/26/02
R2AD1W	11/13/02	11/20/02
R3AU1W	11/13/02	11/26/02
R3BU1W	11/13/02	11/26/02
R2AM2W	11/14/02	11/20/02
R2BM1W	11/14/02	11/20/02
R2CM1W	11/14/02	11/20/02
R2AU1W	11/14/02	11/20/02
R2AM1W	11/14/02	11/20/02
R1AU1W	11/16/02	11/26/02
R1AD1W	11/15/02	11/26/02
R1BM2W	11/16/02	11/26/02
R1CM1W	11/16/02	11/26/02
R1AM1W	11/15/02	11/26/02
R2BU1W	11/15/02	11/26/02
R1BD1W	11/15/02	11/26/02
R1BM1W	11/16/02	11/26/02
R5BN1W	11/17/02	11/26/02
P11W	11/18/02	11/26/02
R1BU1W	11/17/02	11/26/02
R5AN1W	11/17/02	11/26/02
P12W	11/18/02	11/26/02

Test Procedure

The fathead minnow *Pimephales promelas* was used as the test organism. Organisms were exposed to samples for 7 days to determine the effects of the sample on survival and growth. Each sample was tested using undiluted sample along with a laboratory control. Laboratory dilution water consisted of 8 parts nanopure water and 2 parts Perrier® bottled water aerated overnight. The pH, hardness, and alkalinity of the laboratory water were measured and recorded daily to ensure that they were within the ranges designated in the protocol. The test was conducted in an environmental chamber maintained at 25 ± 1ºC under a 16-hour (light): 8-hour (dark) light cycle.

The experimental design consisted of 10 fathead minnows randomly placed into four replicate 250-ml plastic cups per sample. During the test period, each test chamber was monitored daily for mortality. Dead animals, if any, were removed from the test chambers during daily observations. A partial renewal of the test solutions was performed daily by siphoning 80 percent of the test material from each test vessel and immediately replacing it with fresh test solution. Larvae were fed Artemia nauplii (approximately 100 per fish) daily two hours prior to test solution renewal. Measurements of pH, DO, temperature, and conductivity were recorded daily in a composite of each sample. At test termination, organisms were counted, transferred with tweezers to tared weighing pans, and placed in a 60°C drying oven for 24 hours. Following the drying period, the pans were cooled and weighed. Measurements were recorded on the associated bench sheets and an average final weight per organism was calculated.

Final survival, weight, and water quality data were reviewed throughout testing and following termination in accordance with our Quality Assurance/Quality Control Plan. Mean acute survival (96 hours), chronic survival (7 days), and weight data were calculated and reported under separate cover.

References

U.S. Environmental Protection Agency (EPA). 1989. "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms". EPA/600/4-89/001.

CHIRONOMUS & *HYALELLA* 10-DAY SURVIVAL AND GROWTH TEST EXPOSURES

METHODS AND MATERIALS

Sample Collection and Transport

AMEC personnel collected sediment samples between 6 and 18 November 2002. Following collection, sediments were placed in polyethylene bags and sealed to minimize headspace. Bags were placed in ice chests with wet ice, and transported to AMEC's San Diego Bioassay Laboratory by overnight delivery service. Sample materials were received at the laboratory between 7 and 19 November 2002. Sediment samples were identified as listed in Table 1. Appropriate chain-of-custody procedures were employed throughout collection and transport.

Sample Receipt

Upon arrival at the laboratory, coolers were opened and their contents verified. Temperature was measured in one sample from each cooler received and recorded in a bound sample receipt logbook. Interstitial porewater was collected for measurements of ammonia, pH, and conductivity. Interstitial water consisted of a subsample of surface water from each site. During shipment, sediments quickly settle, often leaving a layer of interstitial water on the sediment surface. When surface water was not available, sediments were centrifuged to provide sufficient interstitial water for the measurements specified. Samples were then placed in a cold room maintained at 4 degrees Celsius (°C) cold room until test initiation.

Sediment Preparation and Handling

The entire volume of each sediment sample received was sieved through a 500-micron (μm) Nitex screen to remove resident organisms and debris that may interfere with the survival or recovery of test organisms. The samples were thoroughly homogenized prior to distribution to each replicate chamber for testing. Tests were initiated in four separate dates, as shown in Table 1, grouped according to site name.

Table 1. Sediment Samples Received and Test Initation Dates
***Chironomus & Hyalella* 10-Day Solid Phase**
AMEC - Sauget

Sample ID	Date Collected	Test Initiation Dates *Chironomus*	*Hyalella*
R6AU1S	11/6/02	11/13/02	11/13/02
R6AD1S	11/6/02	11/13/02	11/13/02
R6BU1S	11/6/02	11/13/02	11/13/02
R6BM1S	11/7/02	11/13/02	11/13/02
R6CM1S	11/7/02	11/13/02	11/13/02
R6AM1S	11/7/02	11/13/02	11/13/02
R6AM2S	11/7/02	11/13/02	11/13/02
R5AU1S	11/8/02	11/13/02	11/13/02
R5AM1S	11/8/02	11/13/02	11/13/02
R5BM1S	11/9/02	11/26/02	11/26/02
R5CM1S	11/9/02	11/26/02	11/26/02
R5BU1S	11/9/02	11/26/02	11/26/02
R4BD1S	11/10/02	11/26/02	11/26/02
R4AM1S	11/11/02	11/26/02	11/26/02
R4AD1S	11/10/02	11/26/02	11/26/02
R4CM2S	11/11/02	11/26/02	11/26/02
R4BM1S	11/11/02	11/26/02	11/26/02
R4AU1S	11/11/02	11/26/02	11/26/02
R4CM1S	11/11/02	11/26/02	11/26/02
R4BU1S	11/11/02	11/26/02	11/26/02
R3AM1S	11/12/02	12/6/02	12/6/02
R3AD1S	11/12/02	12/6/02	12/6/02
R3BD1S	11/12/02	12/6/02	12/6/02
R3BM1S	11/12/02	12/6/02	12/6/02
R3CM1S	11/13/02	12/6/02	12/6/02
R3AU1S	11/13/02	12/6/02	12/6/02
R3BU1S	11/13/02	12/6/02	12/6/02
R2BD1S	11/13/02	12/6/02	12/6/02
R2AD1S	11/13/02	12/6/02	12/6/02
R2AM2S	11/14/02	12/6/02	12/6/02
R2BM1S	11/14/02	12/6/02	12/6/02
R2CM1S	11/14/02	12/6/02	12/6/02
R2AU1S	11/14/02	12/6/02	12/6/02
R2BU1S	11/15/02	12/6/02	12/6/02
R2AM1S	11/14/02	12/6/02	12/6/02
R1AU1S	11/16/02	12/13/02	12/17/02
R1AD1S	11/15/02	12/13/02	12/17/02
R1BM2S	11/16/02	12/13/02	12/17/02
R1CM1S	11/16/02	12/13/02	12/17/02
R1AM1S	11/15/02	12/13/02	12/17/02
R1BD1S	11/15/02	12/13/02	12/17/02
R1BM1S	11/16/02	12/13/02	12/17/02
R5BN1S	11/17/02	11/26/02	11/26/02
R5AN1S	11/17/02	11/26/02	11/26/02
R1BU1S	11/17/02	12/13/02	12/17/02
P11S	11/18/02	12/13/02	12/17/02
P12S	11/18/02	12/13/02	12/17/02

Organism Procurement and Handling

Amphipod

Test specimens (*Hyalella azteca*) were obtained on 12 and 23 November and 5 and 12 December 2002 from Aquatic BioSystems in Fort Collins, Colorado. The organisms were sorted by size class, then transported to AMEC in oxygen-saturated water contained in plastic bags. Fine screens were included as a substrate source. An insulated ice chest containing the bags was shipped by overnight delivery service. Upon arrival at the laboratory, organism receipt information was recorded, animal condition specified, and physical parameters including pH, dissolved oxygen (DO), conductivity, and temperature were measured. The amphipods were acclimated to test conditions in order to promote and confirm animal health prior to test initiation. During these acclimation periods, the animals were observed for any indications of stress or significant mortality. Observed mortality is monitored and recorded in animal holding logbooks. Mortality is considered significant if it is greater than 10 percent during the holding and acclimation period. Obvious indications of stress include abnormal swimming behavior, discoloration, and mortality.

Midge Larvae

Test specimens (*Chironomus tentans*) were obtained on 12 and 23 November and 5 and 17 December 2002 from Aquatic BioSystems in Fort Collins, Colorado. The midge larvae were transported to the laboratory in oxygen-saturated water contained in 500-milliliter (ml) plastic containers. Paper towels were included as a substrate source. An insulated ice chest containing the organisms was shipped by overnight delivery service. Upon arrival at AMEC, organism receipt information was recorded and physical parameters and animal condition were specified. The midge larvae were acclimated to test conditions in order to promote and confirm animal health prior to test initiation. During the acclimation period, the animals were observed for any indications of stress or significant mortality. Observed mortality is monitored and recorded in animal holding logbooks. Mortality is considered significant if it is greater than 10 percent during the holding and acclimation period. Obvious indications of stress include abnormal swimming behavior, discoloration, and mortality.

Bioassay Protocol

Bioassays were conducted in accordance with U.S. Environmental Protection Agency (EPA) protocols outlined in "Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition" (2000) and with American Society for Testing and Materials (ASTM) protocols outlined in "Standard Guide for Conducting Sediment Toxicity Tests with Freshwater Invertebrates," E 1383-94 (1994).

Test Procedures

The amphipod *Hyalella azteca* and the midge larvae *Chironomus tentans* were used as the test organisms. Organisms were exposed to test sediments for 10 days to determine the effects of site sediment on survival and growth. Test chambers for both species consisted of 1-liter (L) glass jars supplied with continuous aeration at a rate of one bubble per second. The test was conducted in an environmental chamber maintained at 20 ± 1ºC under a 16-hour (light): 8-hour (dark) light cycle. The experimental design consisted of five replicate jars per site arranged in a predetermined random order on a single shelf in the environmental chamber. An additional replicate was included for each site as a surrogate test chamber for routine water quality measurements to prevent disturbance of the test organisms. The surrogate chamber was treated and handled identically to chambers included in the randomized test exposure.

Two centimeters (cm) of sediment were placed in each chamber. Approximately 800 mls of Culligan-filtered water (Culligan) were then added to each chamber. Culligan is obtained from a city water line connected to a permanent series of filters. Sediments were allowed to settle and the system was allowed to equilibrate for 24 hours prior to the addition of test organisms. Twenty amphipods and 10 midge larvae were randomly selected for addition to each test chamber of their respective tests after confirmation by two technicians that the correct number of test organisms was segregated and in healthy condition. A source of food was provided during the test by adding a 1-ml mixture of ground Tetramin® flakes (0.02 grams (g)) and Culligan per chamber every 2 to 3 days during the testing period. The feeding regime was suspended if the presence of excess food was observed on the sediment surface in several test chambers.

Temperature, DO, pH, and conductivity were monitored daily in the surrogate replicate test chamber for each site. Subsamples of interstitial porewater were collected prior to homogenization and overlying water was collected from each surrogate at the beginning and end of the test for ammonia analysis.

Each test chamber was examined daily to ensure proper airflow. Abnormal conditions or unusual animal behavior, if observed, were also noted at this time. Examples of unusual behavior include failure to bury, erratic or slow movements, and slow response to stimulation.

A sediment control (negative control) and a copper chloride reference toxicant test (positive control) were conducted in conjunction with the test sediments to ensure that organisms were not impacted by stresses other than contamination in the test material. The control sediment consisted of clean washed beach sand obtained from La Jolla Shores beach in La Jolla, California. This site has been reliably used as a clean control site for testing in our laboratory.

At test termination, the contents of each replicate were poured onto a 500µm screen and rinsed with Culligan water. Surviving animals were counted, recorded, and transferred to tared weighing pans. The weighing pans were then placed in a 60°C drying oven. After 24 hours, the pans were weighed to determine the final dry weight of the organisms.

Final survival, weight, and water quality data were reviewed throughout testing and following termination in accordance with our Quality Assurance/Quality Control Plan. Mean survival and weight data were calculated and reported under separate cover.

References

American Society of Testing and Materials (ASTM). 1994. Standard Guide for Conducting Sediment Toxicity Tests with Freshwater Invertebrates. ASTM Designation E 1383-94.

U.S. Environmental Protection Agency (EPA). 2000. Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates. EPA/600/R-99/064.

CORBICULA 28-DAY BIOACCUMULATION TEST EXPOSURES

METHODS AND MATERIALS

Sample Collection and Transport

AMEC personnel collected sediment samples between 6 and 18 November 2002. Following collection, sediments were placed in polyethylene bags and sealed to minimize headspace. Bags were placed in ice chests with wet ice, and transported to the laboratory by overnight delivery service. These samples were received at the laboratory between 7 and 19 November 2002. Sediment samples were identified as listed in Table 1. Appropriate chain-of-custody procedures were employed throughout collection and transport.

Sample Receipt

Upon arrival at AMEC, coolers were opened and their contents verified. Temperature was measured in one sample from each cooler received and recorded in a bound sample receipt logbook. Interstitial porewater was collected for measurements of ammonia, pH, and conductivity. Interstitial water consisted of a subsample of surface water from each site. During shipment, sediments quickly settle, often leaving a layer of interstitial water on the sediment surface. When surface water was not available, sediments were centrifuged to provide sufficient interstitial water for the measurements specified. Samples were then placed in a cold room maintained at 4 degrees Celsius (°C) cold room until test initiation.

Sediment Preparation and Handling

The samples were thoroughly homogenized prior to distribution to each replicate chamber for testing. Tests were initiated on four separate dates, as shown in Table 1, grouped according to site.

Organism Procurement and Handling

The test organism used in this study was the Asian clam, *Corbicula fluminea*. The clams were collected by Brezina and Associates of Dillon Beach, California. An insulated ice chest containing the organisms was shipped by overnight delivery service. Upon arrival at the laboratory, organism receipt information was recorded, animal condition specified, and physical

Table 1. Sediment Samples Received and Test Initation Dates
***Corbicula* 28-Day Bioaccumulation**
AMEC - Sauget

Sample ID	Date Collected	Test Initiation Date	# of Organisms at Initation
R6AU1S	11/6/02	11/20/02	45
R6AD1S	11/6/02	11/20/02	45
R6BU1S	11/6/02	11/20/02	45
R6BM1S	11/7/02	11/20/02	45
R6CM1S	11/7/02	11/20/02	45
R6AM1S	11/7/02	11/20/02	45
R6AM2S	11/7/02	11/20/02	45
R5AU1S	11/8/02	11/20/02	45
R5AM1S	11/8/02	11/20/02	45
R5BM1S	11/9/02	11/20/02	45
R5CM1S	11/9/02	11/20/02	45
R5BU1S	11/9/02	11/20/02	45
R4BD1S	11/10/02	11/20/02	45
R4AM1S	11/11/02	11/20/02	45
R4AD1S	11/10/02	11/20/02	45
R4CM2S	11/11/02	11/20/02	45
R4BM1S	11/11/02	11/20/02	45
R4AU1S	11/11/02	11/21/02	45
R4CM1S	11/11/02	11/21/02	45
R4BU1S	11/11/02	11/21/02	45
R3AM1S	11/12/02	11/21/02	45
R3AD1S	11/12/02	11/21/02	45
R3BD1S	11/12/02	11/21/02	45
R3BM1S	11/12/02	11/21/02	45
R3CM1S	11/13/02	12/3/02	75
R3AU1S	11/13/02	12/3/02	75
R3BU1S	11/13/02	12/3/02	75
R2BD1S	11/13/02	12/3/02	75
R2AD1S	11/13/02	11/21/02	45
R2AM2S	11/14/02	12/3/02	75
R2BM1S	11/14/02	12/3/02	75
R2CM1S	11/14/02	12/3/02	75
R2AU1S	11/14/02	12/3/02	75
R2BU1S	11/15/02	12/3/02	75
R2AM1S	11/14/02	12/3/02	75
R1AU1S	11/16/02	12/5/02	75
R1AD1S	11/15/02	12/5/02	75
R1BM2S	11/16/02	12/5/02	75
R1CM1S	11/16/02	12/5/02	75
R1AM1S	11/15/02	12/5/02	75
R1BD1S	11/15/02	12/5/02	75
R1BM1S	11/16/02	12/5/02	75
R5BN1S	11/17/02	12/5/02	75
R5AN1S	11/17/02	12/5/02	75
R1BU1S	11/17/02	12/5/02	75
P11S	11/18/02	12/5/02	75
P12S	11/18/02	12/5/02	75

measured. A subset of clams were frozen to preserve a pre-test tissue sample should there be any post-exposure concern about the laboratory conditions or potential exposures of control organisms during the assays that might compromise interpretation of bioaccumulation data. The clams were acclimated to test conditions in order to promote and confirm animal health prior to test initiation. During these acclimation periods, the animals were observed for any indications of stress or significant mortality. Observed mortality is monitored and recorded in animal holding logbooks. Mortality is considered significant if greater than 10 percent during the holding and acclimation period.

Bioassay Protocol

Bioassays were conducted in accordance with U.S. Environmental Protection Agency (EPA) protocols outlined in "Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition" (2000) and with American Society for Testing and Materials (ASTM) protocols outlined in "Standard Guide for Conducting Sediment Toxicity Tests with Freshwater Invertebrates," E 1383-94 (1994).

Bioaccumulation Phase Bioassays

Organisms were exposed to test sediments for 28 days to determine the effects of site sediment on survival and bioaccumulation potential of constituents of concern. Test chambers consisted of 19-liter (L) glass aquaria supplied with continuous aeration at a rate of two bubbles per second. The test was conducted in an environmental chamber maintained at 20 ± 1ºC under a 12-hour (light): 12-hour (dark) light cycle. The experimental design consisted of three replicate aquaria per site arranged in order within the environmental chamber. Sediment to a depth of four centimeters (cm) was placed in each test chamber. The aquaria were then filled with Culligan-filtered water (Culligan). Culligan is obtained from a city water line connected to a regularly exchanged series of filters maintained by U.S. Filter.

Sediments were allowed to settle and the system was allowed to equilibrate for 24 hours prior to the addition of test organisms. At initiation, a sufficient number of clams were distributed to the test chambers to provide adequate biomass for chemical analysis (see Table 1). The initial number of clams chosen was based on wet weight of the organisms and was later increased due to concerns about water weight loss resulting from freezing the tissues. All water lost by organisms in the freezing and thawing process should be reincorporated and represented in the

final chemical analyses. Subsamples of interstitial porewater were collected prior to initiation and overlying water was collected from each site every seventh day during the test period. Temperature, DO, pH, and conductivity were monitored daily in every test chamber. Each test chamber was examined daily to ensure proper airflow. To ensure adequate water quality, water renewals were performed every fourth day during the test period by siphoning 80 percent of the overlying water from each test chamber and immediately adding fresh Culligan water.

At the end of 28 days, sediment in the test chambers was sieved to recover the surviving clams. The surviving clams of all replicates from each site were combined into a plastic bag and frozen. Each bag was assigned a random number for identification purposes by the analytical laboratory. The randomization table associated with these data was provided to the program manager and maintained in both the hardcopy and electronic test files and did not accompany the tissues to the analytical laboratory. The clams were frozen and held until shipped to the analytical laboratory on 6 February 2003.

Final survival and water quality data were reviewed throughout testing and following termination in accordance with our Quality Assurance/Quality Control Plan. Mean survival data were calculated and reported under separate cover. Bioaccumulation analyses, the primary endpoint of this assay, were provided directly by the analytical laboratory.

References

American Society of Testing and Materials (ASTM). 1994. Standard Guide for Conducting Sediment Toxicity Tests with Freshwater Invertebrates. ASTM Designation E 1383-94.

U.S. Environmental Protection Agency (EPA). 2000. Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates. EPA/600/R-99/064.

Appendix II-E

Sediment Toxicity Testing Results and Statistical Analysis

AMEC - Sauget
Site R1
Chironomus Summary Results

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	21	9	90		13.10	1.46	
Beach Sand	B	45	10	100		15.80	1.58	
	C	49	10	100		10.30	1.03	
	D	55	9	90		12.50	1.39	
	E	23	6	60		10.10	1.68	
	Surr		5	50	82	9.80	1.96	1.52
R1AU1S	A	28	9	90		20.30	2.26	
	B	44	9	90		23.20	2.58	
	C	53	9	90		17.30	1.92	
	D	17	9	90		22.30	2.48	
	E	2	5	50		12.70	2.54	
	Surr		9	90	83	29.70	3.30	2.51
R1AD1S	A	19	9	90		10.30	1.14	
	B	16	6	60		11.30	1.88	
	C	29	6	60		6.10	1.02	
	D	46	9	90		13.20	1.47	
	E	13	9	90		14.90	1.66	
	Surr		3	30	70	6.30	2.10	1.54
R1BM2S	A	10	4	40		8.80	2.20	
	B	51	6	60		10.10	1.68	
	C	3	9	90		17.00	1.89	
	D	43	9	90		12.80	1.42	
	E	54	5	50		11.90	2.38	
	Surr		5	50	63	10.50	2.10	1.95
R1CM1S	A	6	7	70		16.40	2.34	
	B	41	9	90		12.30	1.37	
	C	1	9	90		16.30	1.81	
	D	34	10	100		17.90	1.79	
	E	42	5	50		11.00	2.20	
	Surr		5	50	75	9.40	1.88	1.90
R1AM1S[a]	A	5	10	100		23.60	2.36	
	B	35	9	90		19.80	2.20	
	C	25	10	100		19.80	1.98	
	D	15	7	70		19.50	2.79	
	E	37	7	70		15.30	2.19	2.30

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
R1BD1S	A	14	7	70		14.90	2.13	
	B	26	10	100		20.20	2.02	
	C	50	10	100		20.70	2.07	
	D	4	6	60		15.30	2.55	
	E	20	10	100		17.40	1.74	
	Surr		5	50	80	14.20	2.84	2.22
R1BM1S	A	24	10	100		14.50	1.45	
	B	11	8	80		15.40	1.93	
	C	36	7	70		16.80	2.40	
	D	40	8	80		12.20	1.53	
	E	52	10	100		14.70	1.47	
	Surr		6	60	82	12.80	2.13	1.82
R1BU1S	A	22	10	100		17.30	1.73	
	B	8	3	30		7.00	2.33	
	C	18	8	80		15.50	1.94	
	D	32	6	60		13.40	2.23	
	E	7	10	100		17.70	1.77	
	Surr		9	90	77	16.80	1.87	1.98

[a] - no surrogate data due to 100% mortality in the surrogate

AMEC - Sauget
Site R2
Chironomus Summary Results

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	40	6	60		5.05	0.84	
Beach Sand	B	38	6	60		9.66	1.61	
	C	22	6	60		6.51	1.09	
	D	66	6	60		8.10	1.35	
	E	19	8	80		6.31	0.79	
	Surr		10	100	70	20.31	2.03	1.28
R2BD1S	A	69	8	80		16.76	2.10	
	B	41	8	80		10.79	1.35	
	C	4	10	100		12.63	1.26	
	D	2	10	100		16.27	1.63	
	E	30	9	90		18.00	2.00	
	Surr		9	90	90	19.32	2.15	1.75
R2AD1S	A	26	4	40		6.93	1.73	
	B	62	9	90		10.93	1.21	
	C	64	7	70		12.34	1.76	
	D	55	9	90		9.67	1.07	
	E	1	9	90		14.48	1.61	
	Surr		10	100	80	11.81	1.18	1.43
R2AM2S	A	46	10	100		14.49	1.45	
	B	25	7	70		13.55	1.94	
	C	77	10	100		23.30	2.33	
	D	27	8	80		9.29	1.16	
	E	29	10	100		10.91	1.09	
	Surr		9	90	90	23.02	2.56	1.75
R2BM1S	A	70	10	100		17.08	1.71	
	B	6	9	90		16.54	1.84	
	C	31	6	60		12.19	2.03	
	D	59	9	90		17.00	1.89	
	E	65	8	80		17.33	2.17	
	Surr		6	60	80	16.85	2.81	2.07
R2CM1S	A	74	8	80		17.35	2.17	
	B	43	9	90		12.99	1.44	
	C	36	10	100		15.71	1.57	
	D	24	9	90		13.28	1.48	
	E	12	10	100		18.17	1.82	
	Surr		10	100	93	28.80	2.88	1.89

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
R2AU1S	A	56	8	80		9.66	1.21	
	B	67	7	70		19.26	2.75	
	C	61	7	70		15.85	2.26	
	D	3	7	70		16.29	2.33	
	E	14	9	90		17.58	1.95	
	Surr		9	90	78	28.97	3.22	2.29
R2BU1S	A	16	9	90		10.86	1.21	
	B	23	7	70		15.02	2.15	
	C	11	8	80		10.99	1.37	
	D	10	8	80		14.79	1.85	
	E	28	8	80		13.11	1.64	
	Surr		10	100	83	31.98	3.20	1.90
R2AM1S	A	42	8	80		9.49	1.19	
	B	75	9	90		29.77	3.31	
	C	13	9	90		19.30	2.14	
	D	20	9	90		9.76	1.08	
	E	48	4	40		7.54	1.89	
	Surr		9	90	80	21.07	2.34	1.99

AMEC - Sauget
Site R3
Chironomus Summary Results

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	40	6	60		5.05	0.84	
Beach Sand	B	38	6	60		9.66	1.61	
	C	22	6	60		6.51	1.09	
	D	66	6	60		8.10	1.35	
	E	19	8	80		6.31	0.79	
	Surr		10	100	70	20.31	2.03	1.28
R3AM1S	A	57	8	80		17.36	2.17	
	B	7	7	70		14.53	2.08	
	C	15	10	100		20.34	2.03	
	D	34	8	80		14.07	1.76	
	E	60	8	80		14.25	1.78	
	Surr		10	100	85	20.84	2.08	1.98
R3AD1S	A	54	9	90		17.74	1.97	
	B	53	8	80		16.80	2.10	
	C	37	6	60		10.25	1.71	
	D	72	5	50		14.08	2.82	
	E	33	10	100		17.38	1.74	
	Surr		6	60	73	15.42	2.57	2.15
R3BD1S	A	21	9	90		17.55	1.95	
	B	45	10	100		11.27	1.13	
	C	71	7	70		20.62	2.95	
	D	39	7	70		9.44	1.35	
	E	50	7	70		10.10	1.44	
	Surr		7	70	78	17.25	2.46	1.88
R3BM1S	A	17	7	70		14.16	2.02	
	B	18	10	100		17.00	1.70	
	C	63	9	90		14.12	1.57	
	D	68	9	90		31.29	3.48	
	E	32	9	90		17.84	1.98	
	Surr		7	70	85	17.95	2.56	2.22
R3CM1S	A	49	8	80		11.74	1.47	
	B	5	8	80		13.33	1.67	
	C	51	7	70		8.57	1.22	
	D	58	6	60		10.54	1.76	
	E	35	7	70		10.75	1.54	
	Surr		7	70	72	12.32	1.76	1.57

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
R3AU1S	A	78	6	60		11.96	1.99	
	B	9	10	100		21.46	2.15	
	C	76	10	100		26.25	2.63	
	D	80	9	90		18.90	2.10	
	E	8	9	90		17.14	1.90	
	Surr		7	70	85	14.57	2.08	2.14
R3BU1S	A	73	8	80		15.41	1.93	
	B	47	10	100		11.62	1.16	
	C	44	7	70		2.04	0.29	
	D	79	6	60		16.42	2.74	
	E	52	10	100		13.33	1.33	
	Surr		9	90	83	20.91	2.32	1.63

AMEC - Sauget
Site R4
Chironomus Summary Results

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	51	5	50		4.05	0.81	
Beach Sand	B	49	4	40		4.92	1.23	
	C	25	7	70		5.09	0.73	
	D	36	7	70		6.05	0.86	
	E	53	5	50		3.15	0.63	
	Surr		9	90	62	8.29	0.92	0.86
R4BD1S	A	39	10	100		10.01	1.00	
	B	65	9	90		9.77	1.09	
	C	9	7	70		7.30	1.04	
	D	42	7	70		6.91	0.99	
	E	66	5	50		7.04	1.41	
	Surr		9	90	78	14.62	1.62	1.19
R4AM1S	A	45	8	80		9.47	1.18	
	B	40	8	80		10.55	1.32	
	C	28	10	100		9.84	0.98	
	D	64	10	100		12.46	1.25	
	E	52	6	60		9.95	1.66	
	Surr		6	60	80	14.95	2.49	1.48
R4AD1S	A	3	6	60		8.31	1.38	
	B	61	5	50		8.80	1.76	
	C	54	8	80		11.74	1.47	
	D	70	8	80		9.02	1.13	
	E	27	7	70		6.36	0.91	
	Surr		9	90	72	13.82	1.54	1.36
R4CM2S	A	60	7	70		12.18	1.74	
	B	38	9	90		10.02	1.11	
	C	8	6	60		7.41	1.24	
	D	50	6	60		6.36	1.06	
	E	24	9	90		9.19	1.02	
	Surr		8	80	75	10.57	1.32	1.25
R4BM1S	A	2	10	100		7.49	0.75	
	B	68	6	60		7.38	1.23	
	C	13	10	100		9.06	0.91	
	D	48	10	100		11.45	1.15	
	E	32	10	100		18.55	1.86	
	Surr		9	90	92	13.17	1.46	1.22

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
R4AU1S	A	33	8	80		9.61	1.20	
	B	67	10	100		15.96	1.60	
	C	11	7	70		7.90	1.13	
	D	14	7	70		5.94	0.85	
	E	30	7	70		8.77	1.25	
	Surr		10	100	82	17.13	1.71	1.29
R4CM1S	A	62	4	40		10.28	2.57	
	B	21	6	60		6.74	1.12	
	C	31	6	60		7.54	1.26	
	D	29	7	70		6.27	0.90	
	E	47	10	100		12.29	1.23	
	Surr		9	90	70	11.20	1.24	1.39
R4BU1S	A	10	8	80		10.02	1.25	
	B	63	9	90		13.74	1.53	
	C	41	6	60		8.94	1.49	
	D	69	8	80		11.37	1.42	
	E	5	10	100		10.39	1.04	
	Surr		8	80	82	7.90	0.99	1.29

AMEC -Sauget
Site R5
Chironomus Summary Results

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	51	5	50		4.05	0.81	
Beach Sand	B	49	4	40		4.92	1.23	
	C	25	7	70		5.09	0.73	
	D	36	7	70		6.05	0.86	
	E	53	5	50		3.15	0.63	
	Surr		9	90	62	8.29	0.92	0.86
R5BM1S	A	55	6	60		9.94	1.66	
	B	34	10	100		11.17	1.12	
	C	56	7	70		8.40	1.20	
	D	22	8	80		9.14	1.14	
	E	26	8	80		8.60	1.07	
	Surr		8	80	78	15.21	1.90	1.35
R5CM1S	A	4	5	50		5.60	1.12	
	B	15	7	70		11.26	1.61	
	C	35	9	90		9.27	1.03	
	D	6	9	90		9.41	1.05	
	E	16	8	80		10.78	1.35	
	Surr		6	60	73	5.69	0.95	1.18
R5BU1S	A	7	8	80		7.92	0.99	
	B	23	9	90		15.23	1.69	
	C	43	9	90		9.13	1.01	
	D	44	8	80		11.60	1.45	
	E	58	7	70		13.51	1.93	
	Surr		7	70	80	14.67	2.10	1.53
R5BN1S	A	37	8	80		10.89	1.36	
	B	18	7	70		9.90	1.41	
	C	57	10	100		14.39	1.44	
	D	12	9	90		10.38	1.15	
	E	19	8	80		9.04	1.13	
	Surr		8	80	83	14.42	1.80	1.38
R5AN1S	A	46	9	90		9.90	1.10	
	B	17	4	40		5.82	1.46	
	C	1	8	80		10.83	1.35	
	D	20	8	80		9.10	1.14	
	E	59	8	80		10.69	1.34	
	Surr		7	70	73	9.78	1.40	1.30

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
R5AU1s	A	5	9	90		19.80	2.20	
	B	43	7	70		23.65	3.38	
	C	22	9	90		16.77	1.86	
	D	1	10	100		24.88	2.49	
	E	29	10	100		17.61	1.76	
	Surr		6	60	85	11.57	1.93	2.27
R5AM1s	A	47	8	80		18.98	2.37	
	B	18	9	90		17.56	1.95	
	C	25	8	80		16.16	2.02	
	D	17	9	90		16.49	1.83	
	E	44	6	60		17.04	2.84	
	Surr		6	60	77	12.33	2.06	2.18

AMEC - Sauget
Site R6
Chironomus Summary Results

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	6	9	90		11.09	1.23	
Beach Sand	B	20	9	90		7.72	0.86	
	C	15	10	100		10.88	1.09	
	D	38	9	90		11.31	1.26	
	E	31	8	80		8.72	1.09	
	Surr		9	90	90	12.43	1.38	1.15
R6AM1s	A	40	6	60		10.65	1.78	
	B	35	8	80		16.79	2.10	
	C	3	8	80		18.89	2.36	
	D	41	5	50		11.77	2.35	
	E	27	8	80		18.43	2.30	
	Surr		9	90	73	19.44	2.16	2.18
R6BM1s	A	36	6	60		13.52	2.25	
	B	34	9	90		21.97	2.44	
	C	23	8	80		11.75	1.47	
	D	50	7	70		14.98	2.14	
	E	11	9	90		21.05	2.34	
	Surr		10	100	82	27.68	2.77	2.24
R6CM1s	A	30	9	90		10.15	1.13	
	B	21	5	50		7.49	1.50	
	C	9	10	100		16.70	1.67	
	D	19	8	80		14.44	1.81	
	E	24	8	80		11.26	1.41	
	Surr		10	100	83	14.34	1.43	1.49
R6AM2s	A	14	8	80		15.65	1.96	
	B	42	7	70		12.46	1.78	
	C	33	8	80		15.08	1.89	
	D	12	9	90		14.75	1.64	
	E	28	9	90		12.67	1.41	
	Surr		8	80	82	16.60	2.08	1.79
R6AU1s	A	37	6	60		13.15	2.19	
	B	39	7	70		15.71	2.24	
	C	7	9	90		19.41	2.16	
	D	4	6	60		15.51	2.59	
	E	10	10	100		22.74	2.27	
	Surr		8	80	77	18.43	2.30	2.29

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
R6AD1s	A	45	4	40		9.78	2.45	
	B	16	5	50		13.86	2.77	
	C	13	9	90		22.09	2.45	
	D	49	10	100		24.73	2.47	
	E	46	9	90		21.65	2.41	
	Surr		7	70	73	15.08	2.15	2.45
R6BU1s	A	8	7	70		15.53	2.22	
	B	48	8	80		16.61	2.08	
	C	2	10	100		23.32	2.33	
	D	32	9	90		17.49	1.94	
	E	26	8	80		16.85	2.11	
	Surr		8	80	83	17.26	2.16	2.14

********** CHIRONOMUS *****`********

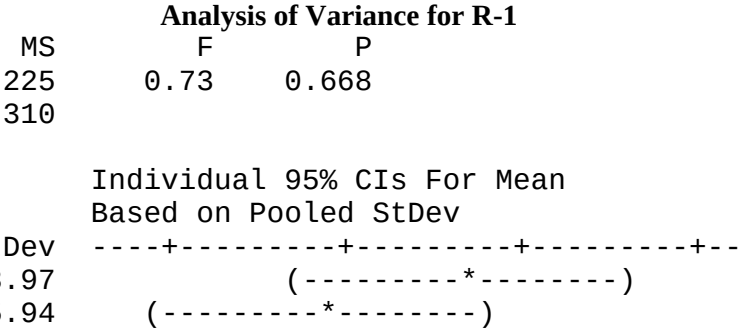
One-way Analysis of Variance

Analysis of Variance for R-1

Source	DF	SS	MS	F	P
R-1	8	1797	225	0.73	0.668
Error	44	13622	310		
Total	52	15420			

Level	N	Mean	StDev
CONTROL	6	69.82	18.97
R1AD1S	6	58.24	15.94
R1AM1Sa	5	73.03	16.63
R1AU1S	6	67.14	10.85
R1BD1S	6	70.43	21.76
R1BM1S	6	69.07	16.88
R1BM2S	6	53.86	14.19
R1BU1S	6	66.50	22.34
R1CM1S	6	63.32	17.67

Individual 95% CIs For Mean
Based on Pooled StDev



Pooled StDev = 17.60

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00828

Critical value = 2.77

Control = level (CONTROL) of R-1

Level	Lower	Center	Upper
R1AD1S	-39.67	-11.58	16.51

```
R1AM1Sa     -26.25      3.21     32.67         (----------*-----------)
R1AU1S      -30.77     -2.68     25.41       (----------*----------)
R1BD1S      -27.48      0.61     28.70        (----------*----------)
R1BM1S      -28.83     -0.75     27.34       (-----------*----------)
R1BM2S      -44.05    -15.96     12.13 (-----------*----------)
R1BU1S      -31.41     -3.32     24.77      (-----------*----------)
R1CM1S      -34.59     -6.50     21.59     (----------*-----------)
                                       --------+---------+---------+---------
                                             -25         0        25
```

Tukey's pairwise comparisons

```
    Family error rate = 0.0500
Individual error rate = 0.00216

Critical value = 4.61
```

Intervals for (column level mean) - (row level mean)

	CONTROL	R1AD1S	R1AM1Sa	R1AU1S	R1BD1S	R1BM1S
R1AD1S	-21.54 44.69					
R1AM1Sa	-37.94 31.52	-49.52 19.94				
R1AU1S	-30.44 35.79	-42.01 24.22	-28.84 40.62			
R1BD1S	-33.72 32.50	-45.30 20.93	-32.13 37.33	-36.40 29.83		
R1BM1S	-32.37 33.86	-43.95 22.28	-30.77 38.69	-35.05 31.18	-31.76 34.47	

R1BM2S	-17.15	-28.73	-15.56	-19.83	-16.54	-17.90
	49.08	37.50	53.90	46.40	49.69	48.33
R1BU1S	-29.79	-41.37	-28.20	-32.47	-29.19	-30.54
	36.43	24.86	41.26	33.76	37.04	35.69
R1CM1S	-26.62	-38.19	-25.02	-29.30	-26.01	-27.36
	39.61	28.04	44.44	36.93	40.22	38.87

	R1BM2S	R1BU1S
R1BU1S	-45.76	
	20.47	
R1CM1S	-42.58	-29.94
	23.65	36.29

One-way Analysis of Variance

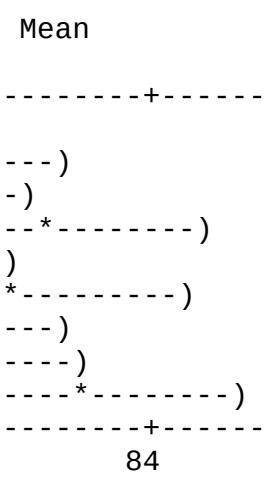
Analysis of Variance for R-2

Source	DF	SS	MS	F	P
R-2	8	2209	276	1.52	0.179
Error	45	8196	182		
Total	53	10405			

Level	N	Mean	StDev
CONTROL	6	59.42	15.82
R2AD1S	6	66.79	17.13
R2AM1S	6	64.82	12.95
R2AM2S	6	76.96	15.03
R2AU1S	6	62.82	7.24
R2BD1S	6	75.00	12.17
R2BM1S	6	66.35	14.88
R2BU1S	6	68.11	11.70
R2CM1S	6	79.43	11.96

Pooled StDev = 13.50

Individual 95% CIs For Mean Based on Pooled StDev



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00833

Critical value = 2.76

Control = level (CONTROL) of R-2

Level	Lower	Center	Upper
R2AD1S	-14.14	7.37	28.87
R2AM1S	-16.10	5.40	26.91
R2AM2S	-3.96	17.55	39.05
R2AU1S	-18.10	3.40	24.91
R2BD1S	-5.93	15.58	37.09

```
R2BM1S      -14.57      6.93     28.44    (------------*-------------)
R2BU1S      -12.82      8.69     30.20     (------------*-------------)
R2CM1S       -1.50     20.01     41.52            (-------------*------------)
                                      --+---------+---------+---------+-----
                                      -16         0        16        32
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00213

Critical value = 4.61

Intervals for (column level mean) - (row level mean)

	CONTROL	R2AD1S	R2AM1S	R2AM2S	R2AU1S	R2BD1S
R2AD1S	-32.77 18.03					
R2AM1S	-30.80 20.00	-23.43 27.36				
R2AM2S	-42.95 7.85	-35.58 15.22	-37.54 13.26			
R2AU1S	-28.80 22.00	-21.44 29.36	-23.40 27.40	-11.26 39.54		
R2BD1S	-40.98 9.82	-33.61 17.18	-35.58 15.22	-23.43 27.36	-37.58 13.22	
R2BM1S	-32.33 18.47	-24.96 25.83	-26.93 23.87	-14.78 36.01	-28.93 21.87	-16.75 34.05

R2BU1S	-34.09	-26.72	-28.69	-16.54	-30.69	-18.51
	16.71	24.08	22.11	34.25	20.11	32.29
R2CM1S	-45.41	-38.04	-40.01	-27.86	-42.00	-29.83
	5.39	12.76	10.79	22.94	8.79	20.97

	R2BM1S	R2BU1S
R2BU1S	-27.16	
	23.64	
R2CM1S	-38.48	-36.72
	12.32	14.08

One-way Analysis of Variance

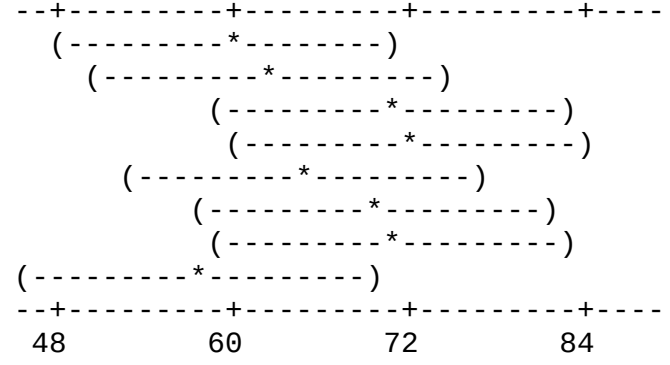
Analysis of Variance for R-3

Source	DF	SS	MS	F	P
R-3	7	1314	188	0.91	0.512
Error	40	8293	207		
Total	47	9607			

Level	N	Mean	StDev
CONTROL	6	59.42	15.82
R3AD1S	6	61.92	16.85
R3AM1S	6	71.18	14.80
R3AU1S	6	71.78	16.31
R3BD1S	6	64.79	13.69
R3BM1S	6	69.71	12.30
R3BU1S	6	70.43	16.67
R3CM1S	6	58.00	4.81

Pooled StDev = 14.40

Individual 95% CIs For Mean Based on Pooled StDev



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00935

Critical value = 2.73

Control = level (CONTROL) of R-3

Level	Lower	Center	Upper
R3AD1S	-20.20	2.50	25.21
R3AM1S	-10.94	11.76	34.47
R3AU1S	-10.34	12.36	35.07
R3BD1S	-17.33	5.37	28.07

```
R3BM1S      -12.41     10.29     33.00         (-------------*-------------)
R3BU1S      -11.70     11.01     33.71          (-------------*-------------)
R3CM1S      -24.12     -1.42     21.29  (-------------*-------------)
                                       ------+---------+---------+---------+-
                                           -16         0        16        32
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00272

Critical value = 4.52

Intervals for (column level mean) - (row level mean)

	CONTROL	R3AD1S	R3AM1S	R3AU1S	R3BD1S	R3BM1S
R3AD1S	-29.07 24.07					
R3AM1S	-38.33 14.81	-35.83 17.31				
R3AU1S	-38.93 14.21	-36.43 16.71	-27.17 25.97			
R3BD1S	-31.94 21.20	-29.43 23.71	-20.17 32.97	-19.58 33.56		
R3BM1S	-36.86 16.28	-34.36 18.78	-25.10 28.04	-24.50 28.64	-31.50 21.64	
R3BU1S	-37.58 15.56	-35.07 18.07	-25.81 27.33	-25.22 27.93	-32.21 20.93	-27.28 25.86

R3CM1S	-25.15	-22.65	-13.39	-12.79	-19.78	-14.86
	27.99	30.49	39.75	40.35	33.36	38.28

	R3BU1S
R3CM1S	-14.14
	39.00

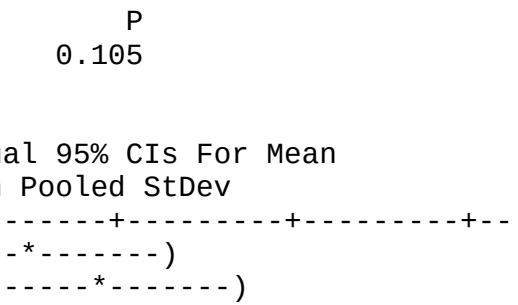
One-way Analysis of Variance

Analysis of Variance for R-4

Source	DF	SS	MS	F	P
R-4	8	3061	383	1.79	0.105
Error	45	9640	214		
Total	53	12701			

Level	N	Mean	StDev
CONTROL	6	52.40	11.74
R4AD1S	6	58.50	9.64
R4AM1S	6	68.07	17.91
R4AU1S	6	68.97	16.49
R4BD1S	6	65.28	15.78
R4BM1S	6	80.39	16.28
R4BU1S	6	67.11	13.05
R4CM1S	6	59.85	18.14
R4CM2S	6	60.82	9.55

Individual 95% CIs For Mean Based on Pooled StDev



Pooled StDev = 14.64

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00833

Critical value = 2.76

Control = level (CONTROL) of R-4

Level	Lower	Center	Upper
R4AD1S	-17.22	6.10	29.43
R4AM1S	-7.65	15.67	39.00
R4AU1S	-6.75	16.57	39.90

```
R4BD1S      -10.44      12.89      36.21      (----------*----------)
R4BM1S        4.67      27.99      51.32             (-----------*-----------)
R4BU1S       -8.61      14.71      38.04       (----------*----------)
R4CM1S      -15.87       7.46      30.78  (-----------*----------)
R4CM2S      -14.91       8.42      31.74   (----------*----------)
                                       ---------+---------+---------+--------
                                                0        20        40
```

Tukey's pairwise comparisons

```
    Family error rate = 0.0500
Individual error rate = 0.00213

Critical value = 4.61
```

Intervals for (column level mean) - (row level mean)

	CONTROL	R4AD1S	R4AM1S	R4AU1S	R4BD1S	R4BM1S
R4AD1S	-33.65 21.44					
R4AM1S	-43.22 11.87	-37.12 17.98				
R4AU1S	-44.12 10.98	-38.01 17.08	-28.45 26.65			
R4BD1S	-40.44 14.66	-34.33 20.76	-24.76 30.33	-23.86 31.23		
R4BM1S	-55.54 -0.45	-49.44 5.66	-39.87 15.23	-38.97 16.12	-42.65 12.44	
R4BU1S	-42.26	-36.15	-26.58	-25.69	-29.37	-14.26

	12.84	18.94	28.51	29.41	25.72	40.83
R4CM1S	-35.00	-28.90	-19.33	-18.43	-22.12	-7.01
	20.09	26.19	35.76	36.66	32.98	48.08
R4CM2S	-35.97	-29.86	-20.29	-19.39	-23.08	-7.97
	19.13	25.23	34.80	35.70	32.02	47.12

	R4BU1S	R4CM1S
R4CM1S	-20.29	
	34.80	
R4CM2S	-21.26	-28.51
	33.84	26.58

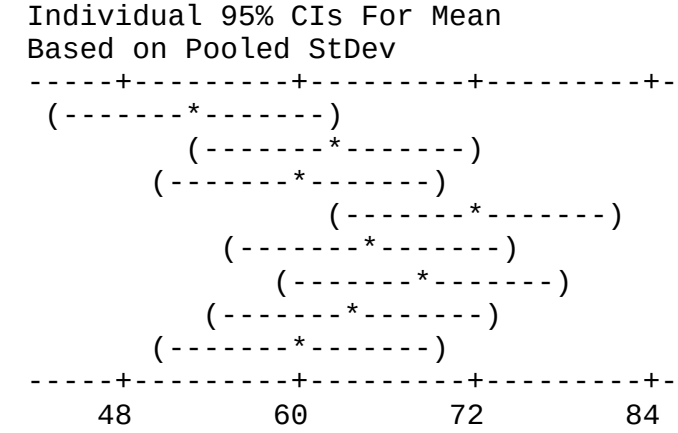
One-way Analysis of Variance

Analysis of Variance for R-5

Source	DF	SS	MS	F	P
R-5	7	1447	207	1.51	0.192
Error	40	5474	137		
Total	47	6921			

Level	N	Mean	StDev
CONTROL	6	52.40	11.74
R5AM1s	6	61.92	9.37
R5AN1S	6	59.65	11.05
R5AU1s	6	71.78	16.31
R5BM1S	6	64.64	13.43
R5BN1S	6	68.11	11.70
R5BU1S	6	63.93	6.62
R5CM1S	6	59.85	10.95

Pooled StDev = 11.70



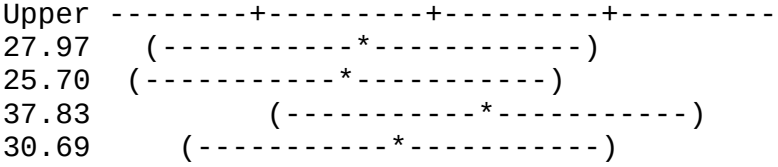
Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00935

Critical value = 2.73

Control = level (CONTROL) of R-5

Level	Lower	Center	Upper
R5AM1s	-8.92	9.53	27.97
R5AN1S	-11.19	7.25	25.70
R5AU1s	0.94	19.39	37.83
R5BM1S	-6.20	12.25	30.69



```
R5BN1S       -2.73     15.71     34.16       (-----------*------------)
R5BU1S       -6.91     11.53     29.98    (------------*-----------)
R5CM1S      -10.99      7.46     25.90  (-----------*-----------)
                                      --------+---------+---------+---------
                                              0        15        30
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00272

Critical value = 4.52

Intervals for (column level mean) - (row level mean)

	CONTROL	R5AM1s	R5AN1S	R5AU1s	R5BM1S	R5BN1S
R5AM1s	-31.11 12.06					
R5AN1S	-28.84 14.33	-19.31 23.86				
R5AU1s	-40.97 2.20	-31.44 11.73	-33.72 9.45			
R5BM1S	-33.83 9.34	-24.31 18.86	-26.58 16.59	-14.45 28.72		
R5BN1S	-37.30 5.87	-27.77 15.40	-30.05 13.12	-17.91 25.26	-25.05 18.12	
R5BU1S	-33.12 10.05	-23.59 19.58	-25.87 17.30	-13.73 29.44	-20.87 22.30	-17.41 25.77

R5CM1S	-29.04	-19.52	-21.79	-9.66	-16.80	-13.33
	14.13	23.65	21.38	33.51	26.38	29.84

	R5BU1S
R5CM1S	-17.51
	25.66

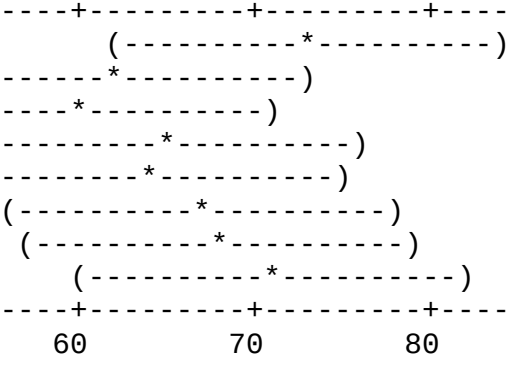
One-way Analysis of Variance

Analysis of Variance for R-6

Source	DF	SS	MS	F	P
R-6	7	835	119	0.67	0.695
Error	40	7111	178		
Total	47	7946			

Level	N	Mean	StDev
CONTROL	6	73.28	8.81
R6AD1s	6	62.36	18.98
R6AM1s	6	59.61	9.78
R6AM2s	6	65.04	5.67
R6AU1s	6	63.89	15.07
R6BM1s	6	67.35	13.79
R6BU1s	6	68.11	11.70
R6CM1s	6	70.57	17.39

Individual 95% CIs For Mean
Based on Pooled StDev



Pooled StDev = 13.33

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00935

Critical value = 2.73

Control = level (CONTROL) of R-6

Level	Lower	Center	Upper
R6AD1s	-31.95	-10.92	10.10
R6AM1s	-34.70	-13.68	7.35
R6AM2s	-29.27	-8.25	12.78
R6AU1s	-30.42	-9.39	11.63

```
R6BM1s      -26.95     -5.93     15.09       (-------------*-------------)
R6BU1s      -26.20     -5.17     15.85        (-------------*-------------)
R6CM1s      -23.73     -2.71     18.31         (-------------*-------------)
                                       ----+---------+---------+---------+---
                                         -30       -15         0        15
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00272

Critical value = 4.52

Intervals for (column level mean) - (row level mean)

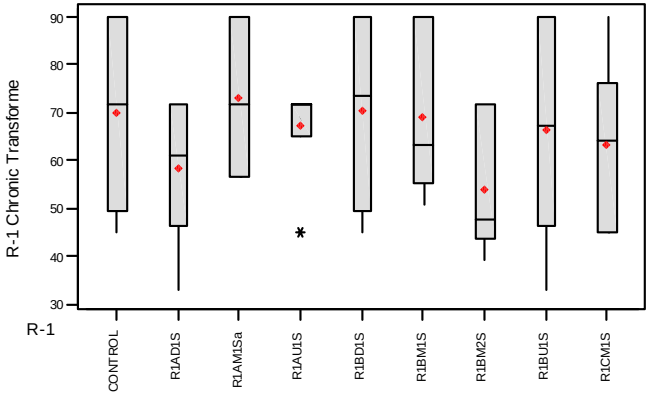
	CONTROL	R6AD1s	R6AM1s	R6AM2s	R6AU1s	R6BM1s
R6AD1s	-13.68 35.53					
R6AM1s	-10.93 38.28	-21.85 27.36				
R6AM2s	-16.36 32.85	-27.28 21.92	-30.03 19.17			
R6AU1s	-15.21 34.00	-26.13 23.07	-28.88 20.32	-23.45 25.75		
R6BM1s	-18.67 30.53	-29.60 19.61	-32.35 16.86	-26.92 22.29	-28.07 21.14	
R6BU1s	-19.43 29.78	-30.35 18.85	-33.11 16.10	-27.68 21.53	-28.83 20.38	-25.36 23.85

R6CM1s	-21.89	-32.82	-35.57	-30.14	-31.29	-27.82
	27.31	16.39	13.64	19.07	17.92	21.38

	R6BU1s
R6CM1s	-27.07
	22.14

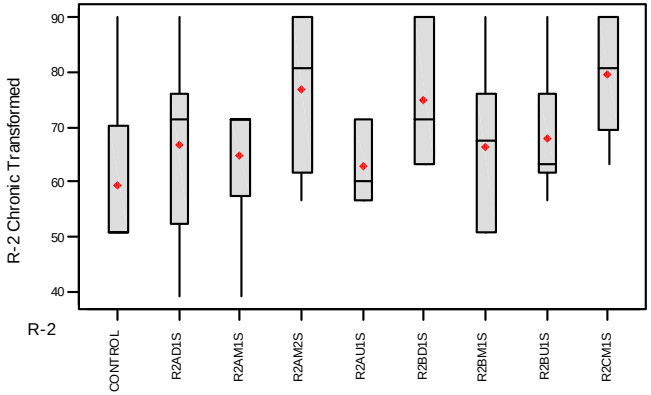
Boxplots of R-1 Chironomus Survival

(means are indicated by solid circles)



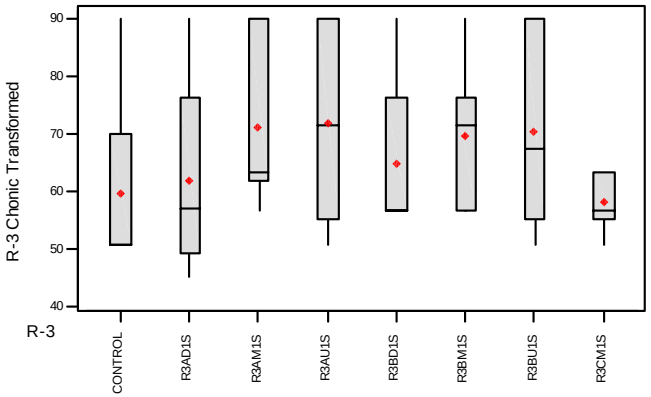
Boxplots of R-2 Chironomus Survival

(means are indicated by solid circles)



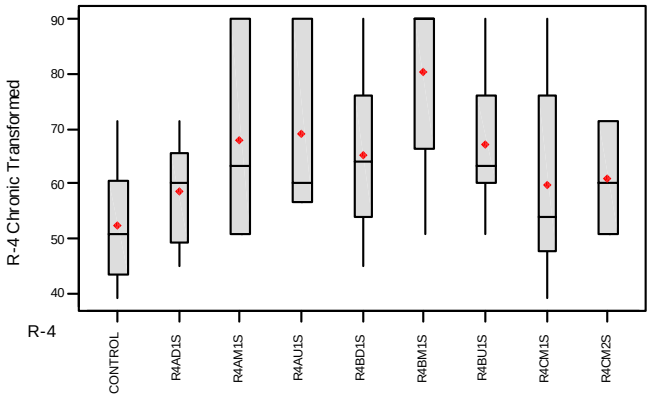
Boxplots of R-3 Chironomus Survival

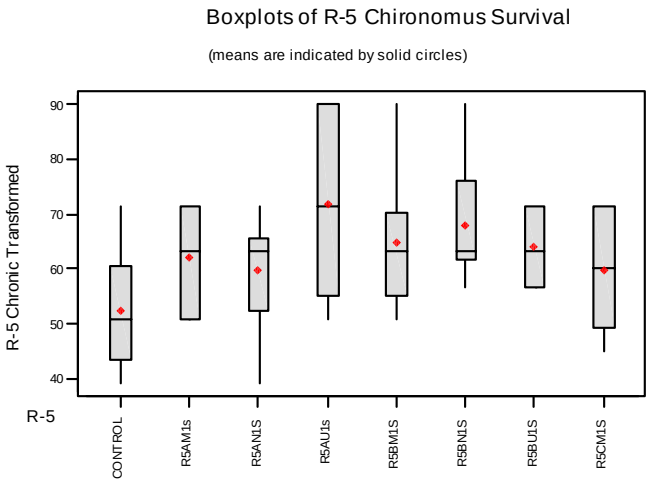
(means are indicated by solid circles)

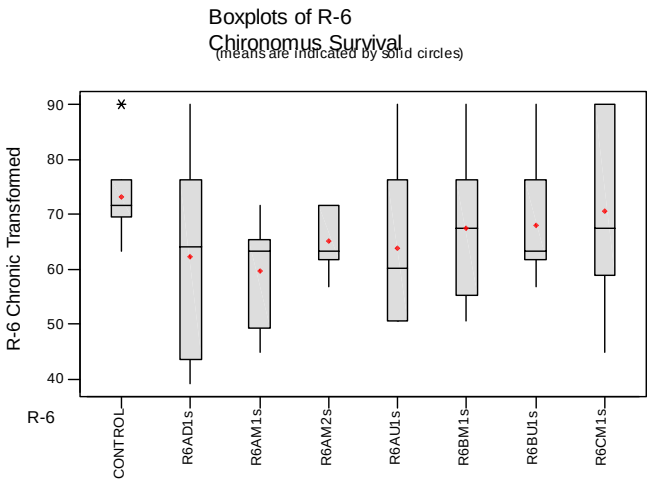


Boxplots of R-4 Chironomus Survival

(means are indicated by solid circles)




Boxplots of R-5 Chironomus Survival
(means are indicated by solid circles)
R-5 Chronic Transformed
90
80
70
60
50
40
R-5
CONTROL
R5AM1s
R5AN1S
R5AU1s
R5BM1S
R5BN1S
R5BU1S
R5CM1S


Boxplots of R-6
Chironomus Survival
(means are indicated by solid circles)
R-6 Chronic Transformed
90
80
70
60
50
40
R-6
CONTROL
R6AD1s
R6AM1s
R6AM2s
R6AU1s
R6BM1s
R6BU1s
R6CM1s

******* Chironomus Growth Analysis****************

One-way Analysis of Variance

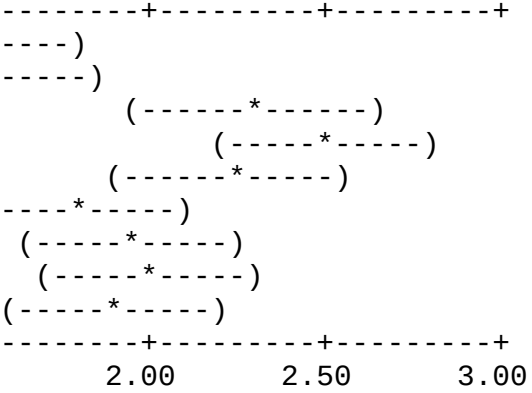
Analysis of Variance for R-1 Weig

Source	DF	SS	MS	F	P
R-1	8	5.208	0.651	4.88	0.000
Error	44	5.871	0.133		
Total	52	11.079			

Level	N	Mean	StDev
CONTROL	6	1.5167	0.3109
R1AD1S	6	1.5450	0.4192
R1AM1Sa	5	2.3040	0.3034
R1AU1S	6	2.5133	0.4564
R1BD1S	6	2.2250	0.3985
R1BM1S	6	1.8183	0.3970
R1BM2S	6	1.9450	0.3542
R1BU1S	6	1.9783	0.2471
R1CM1S	6	1.8983	0.3421

Pooled StDev = 0.3653

Individual 95% CIs For Mean
Based on Pooled StDev



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00828

Critical value = 2.77

Control = level (CONTROL) of R-1

Level	Lower	Center	Upper
R1AD1S	-0.5548	0.0283	0.6115

```
R1AM1Sa     0.1757    0.7873    1.3990              (---------*---------)
R1AU1S      0.4135    0.9967    1.5798                  (---------*--------)
R1BD1S      0.1252    0.7083    1.2915             (---------*---------)
R1BM1S     -0.2815    0.3017    0.8848      (---------*---------)
R1BM2S     -0.1548    0.4283    1.0115        (---------*---------)
R1BU1S     -0.1215    0.4617    1.0448         (---------*--------)
R1CM1S     -0.2015    0.3817    0.9648        (--------*---------)
                                    ----------+---------+---------+-------
                                            0.00      0.60      1.20
```

Tukey's pairwise comparisons

```
    Family error rate = 0.0500
Individual error rate = 0.00216
```

Critical value = 4.61

Intervals for (column level mean) - (row level mean)

	CONTROL	R1AD1S	R1AM1Sa	R1AU1S	R1BD1S	R1BM1S
R1AD1S	-0.7158 0.6592					
R1AM1Sa	-1.5084 -0.0663	-1.4800 -0.0380				
R1AU1S	-1.6842 -0.3092	-1.6558 -0.2808	-0.9304 0.5117			
R1BD1S	-1.3958 -0.0208	-1.3675 0.0075	-0.6420 0.8000	-0.3992 0.9758		
R1BM1S	-0.9892 0.3858	-0.9608 0.4142	-0.2354 1.2067	0.0075 1.3825	-0.2808 1.0942	

R1BM2S	-1.1158	-1.0875	-0.3620	-0.1192	-0.4075	-0.8142
	0.2592	0.2875	1.0800	1.2558	0.9675	0.5608
R1BU1S	-1.1492	-1.1208	-0.3954	-0.1525	-0.4408	-0.8475
	0.2258	0.2542	1.0467	1.2225	0.9342	0.5275
R1CM1S	-1.0692	-1.0408	-0.3154	-0.0725	-0.3608	-0.7675
	0.3058	0.3342	1.1267	1.3025	1.0142	0.6075

	R1BM2S	R1BU1S
R1BU1S	-0.7208	
	0.6542	
R1CM1S	-0.6408	-0.6075
	0.7342	0.7675

One-way Analysis of Variance

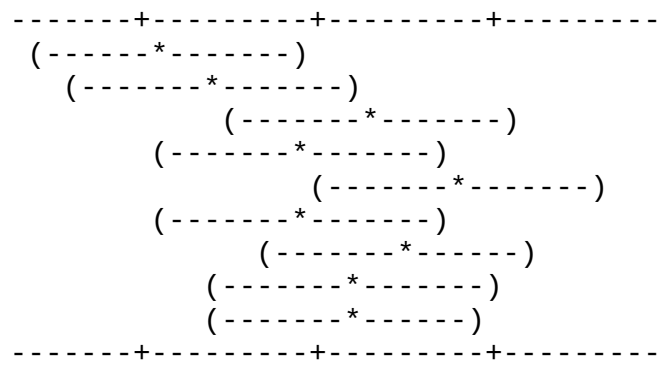
Analysis of Variance for R-2 Weig

Source	DF	SS	MS	F	P
R-2	8	4.649	0.581	1.76	0.112
Error	45	14.896	0.331		
Total	53	19.545			

Level	N	Mean	StDev
CONTROL	6	1.2850	0.4787
R2AD1S	6	1.4267	0.3072
R2AM1S	6	1.9917	0.8204
R2AM2S	6	1.7550	0.6168
R2AU1S	6	2.2867	0.6872
R2BD1S	6	1.7483	0.3897
R2BM1S	6	2.0750	0.3934
R2BU1S	6	1.9033	0.7183
R2CM1S	6	1.8933	0.5543

Pooled StDev = 0.5753

Individual 95% CIs For Mean
Based on Pooled StDev



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00833

Critical value = 2.76

Control = level (CONTROL) of R-2

Level	Lower	Center	Upper
R2AD1S	-0.7752	0.1417	1.0585
R2AM1S	-0.2102	0.7067	1.6235

```
R2AM2S     -0.4469    0.4700    1.3869     (-----------*----------)
R2AU1S      0.0848    1.0017    1.9185           (-----------*----------)
R2BD1S     -0.4535    0.4633    1.3802     (-----------*----------)
R2BM1S     -0.1269    0.7900    1.7069         (-----------*----------)
R2BU1S     -0.2985    0.6183    1.5352       (-----------*----------)
R2CM1S     -0.3085    0.6083    1.5252       (-----------*----------)
                                       ----------+---------+---------+-------
                                              0.00      0.80      1.60
```

Tukey's pairwise comparisons

```
    Family error rate = 0.0500
Individual error rate = 0.00213

Critical value = 4.61
```

Intervals for (column level mean) - (row level mean)

	CONTROL	R2AD1S	R2AM1S	R2AM2S	R2AU1S	R2BD1S
R2AD1S	-1.2245 0.9411					
R2AM1S	-1.7895 0.3761	-1.6478 0.5178				
R2AM2S	-1.5528 0.6128	-1.4111 0.7545	-0.8461 1.3195			
R2AU1S	-2.0845 0.0811	-1.9428 0.2228	-1.3778 0.7878	-1.6145 0.5511		
R2BD1S	-1.5461 0.6195	-1.4045 0.7611	-0.8395 1.3261	-1.0761 1.0895	-0.5445 1.6211	

R2BM1S	-1.8728	-1.7311	-1.1661	-1.4028	-0.8711	-1.4095
	0.2928	0.4345	0.9995	0.7628	1.2945	0.7561
R2BU1S	-1.7011	-1.5595	-0.9945	-1.2311	-0.6995	-1.2378
	0.4645	0.6061	1.1711	0.9345	1.4661	0.9278
R2CM1S	-1.6911	-1.5495	-0.9845	-1.2211	-0.6895	-1.2278
	0.4745	0.6161	1.1811	0.9445	1.4761	0.9378

	R2BM1S	R2BU1S
R2BU1S	-0.9111	
	1.2545	
R2CM1S	-0.9011	-1.0728
	1.2645	1.0928

One-way Analysis of Variance

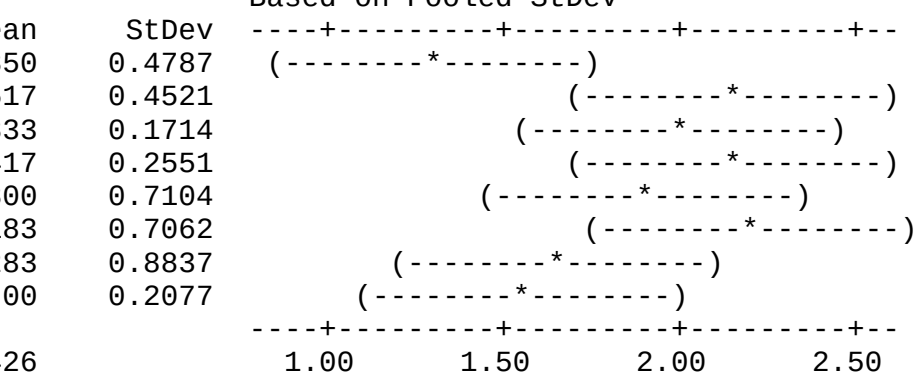
Analysis of Variance for R-3 Weig

Source	DF	SS	MS	F	P
R-3	7	4.661	0.666	2.26	0.049
Error	40	11.777	0.294		
Total	47	16.438			

Level	N	Mean	StDev
CONTROL	6	1.2850	0.4787
R3AD1S	6	2.1517	0.4521
R3AM1S	6	1.9833	0.1714
R3AU1S	6	2.1417	0.2551
R3BD1S	6	1.8800	0.7104
R3BM1S	6	2.2183	0.7062
R3BU1S	6	1.6283	0.8837
R3CM1S	6	1.5700	0.2077

Pooled StDev = 0.5426

Individual 95% CIs For Mean
Based on Pooled StDev



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00935

Critical value = 2.73

Control = level (CONTROL) of R-3

Level	Lower	Center	Upper
R3AD1S	0.0111	0.8667	1.7222
R3AM1S	-0.1572	0.6983	1.5539
R3AU1S	0.0011	0.8567	1.7122
R3BD1S	-0.2606	0.5950	1.4506
R3BM1S	0.0778	0.9333	1.7889

```
R3BU1S     -0.5122    0.3433    1.1989   (-----------*-----------)
R3CM1S     -0.5706    0.2850    1.1406  (-----------*-----------)
                                        ---------+---------+---------+--------
                                              0.00      0.70      1.40
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00272

Critical value = 4.52

Intervals for (column level mean) - (row level mean)

	CONTROL	R3AD1S	R3AM1S	R3AU1S	R3BD1S	R3BM1S
R3AD1S	-1.8680 0.1346					
R3AM1S	-1.6996 0.3030	-0.8330 1.1696				
R3AU1S	-1.8580 0.1446	-0.9913 1.0113	-1.1596 0.8430			
R3BD1S	-1.5963 0.4063	-0.7296 1.2730	-0.8980 1.1046	-0.7396 1.2630		
R3BM1S	-1.9346 0.0680	-1.0680 0.9346	-1.2363 0.7663	-1.0780 0.9246	-1.3396 0.6630	
R3BU1S	-1.3446 0.6580	-0.4780 1.5246	-0.6463 1.3563	-0.4880 1.5146	-0.7496 1.2530	-0.4113 1.5913
R3CM1S	-1.2863	-0.4196	-0.5880	-0.4296	-0.6913	-0.3530

	0.7163	1.5830	1.4146	1.5730	1.3113	1.6496

	R3BU1S
R3CM1S	-0.9430 1.0596

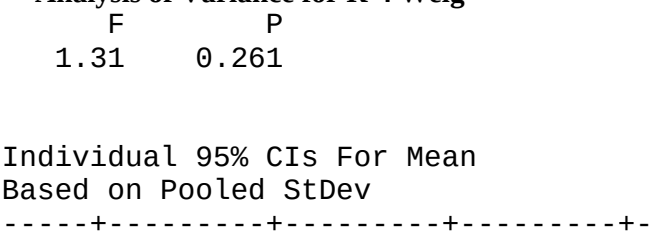
One-way Analysis of Variance

Analysis of Variance for R-4 Weig

Source	DF	SS	MS	F	P
R-4	8	1.442	0.180	1.31	0.261
Error	45	6.169	0.137		
Total	53	7.611			

Level	N	Mean	StDev
CONTROL	6	0.8633	0.2063
R4AD1S	6	1.3650	0.3034
R4AM1S	6	1.4800	0.5424
R4AU1S	6	1.2900	0.3167
R4BD1S	6	1.1917	0.2615
R4BM1S	6	1.2267	0.3972
R4BU1S	6	1.2867	0.2317
R4CM1S	6	1.3867	0.5950
R4CM2S	6	1.2483	0.2660

Individual 95% CIs For Mean
Based on Pooled StDev



Pooled StDev = 0.3702

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00833

Critical value = 2.76

Control = level (CONTROL) of R-4

Level	Lower	Center	Upper
R4AD1S	-0.0884	0.5017	1.0917
R4AM1S	0.0266	0.6167	1.2067
R4AU1S	-0.1634	0.4267	1.0167

```
R4BD1S     -0.2617    0.3283    0.9184 (--------------*--------------)
R4BM1S     -0.2267    0.3633    0.9534  (--------------*--------------)
R4BU1S     -0.1667    0.4233    1.0134    (--------------*--------------)
R4CM1S     -0.0667    0.5233    1.1134      (--------------*--------------)
R4CM2S     -0.2050    0.3850    0.9750   (--------------*-------------)
                                       -------+---------+---------+---------+
                                           0.00      0.40      0.80      1.20
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00213

Critical value = 4.61

Intervals for (column level mean) - (row level mean)

	CONTROL	R4AD1S	R4AM1S	R4AU1S	R4BD1S	R4BM1S
R4AD1S	-1.1985 0.1951					
R4AM1S	-1.3135 0.0801	-0.8118 0.5818				
R4AU1S	-1.1235 0.2701	-0.6218 0.7718	-0.5068 0.8868			
R4BD1S	-1.0251 0.3685	-0.5235 0.8701	-0.4085 0.9851	-0.5985 0.7951		
R4BM1S	-1.0601 0.3335	-0.5585 0.8351	-0.4435 0.9501	-0.6335 0.7601	-0.7318 0.6618	
R4BU1S	-1.1201	-0.6185	-0.5035	-0.6935	-0.7918	-0.7568

	0.2735	0.7751	0.8901	0.7001	0.6018	0.6368
R4CM1S	-1.2201	-0.7185	-0.6035	-0.7935	-0.8918	-0.8568
	0.1735	0.6751	0.7901	0.6001	0.5018	0.5368
R4CM2S	-1.0818	-0.5801	-0.4651	-0.6551	-0.7535	-0.7185
	0.3118	0.8135	0.9285	0.7385	0.6401	0.6751

	R4BU1S	R4CM1S
R4CM1S	-0.7968	
	0.5968	
R4CM2S	-0.6585	-0.5585
	0.7351	0.8351

One-way Analysis of Variance

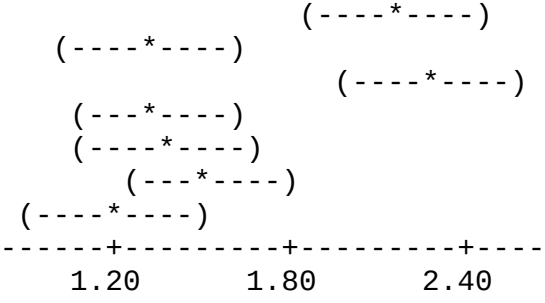
Analysis of Variance for R-5 Weig

Source	DF	SS	MS	F	P
R-5	7	9.814	1.402	10.96	0.000
Error	40	5.116	0.128		
Total	47	14.930			

Level	N	Mean	StDev
CONTROL	6	0.8633	0.2063
R5AM1s	6	2.1783	0.3707
R5AN1S	6	1.2983	0.1451
R5AU1s	6	2.2700	0.6048
R5BM1S	6	1.3483	0.3454
R5BN1S	6	1.3817	0.2436
R5BU1S	6	1.5283	0.4645
R5CM1S	6	1.1850	0.2488

Pooled StDev = 0.3576

Individual 95% CIs For Mean
Based on Pooled StDev



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00935

Critical value = 2.73

Control = level (CONTROL) of R-5

Level	Lower	Center	Upper
R5AM1s	0.7511	1.3150	1.8789
R5AN1S	-0.1289	0.4350	0.9989
R5AU1s	0.8428	1.4067	1.9706
R5BM1S	-0.0789	0.4850	1.0489

```
R5BN1S     -0.0456    0.5183    1.0822     (---------*--------)
R5BU1S      0.1011    0.6650    1.2289        (--------*--------)
R5CM1S     -0.2422    0.3217    0.8856  (---------*---------)
                                       -----+---------+---------+---------+--
                                          0.00      0.60      1.20      1.80
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00272

Critical value = 4.52

Intervals for (column level mean) - (row level mean)

	CONTROL	R5AM1s	R5AN1S	R5AU1s	R5BM1S	R5BN1S
R5AM1s	-1.9749 -0.6551					
R5AN1S	-1.0949 0.2249	0.2201 1.5399				
R5AU1s	-2.0666 -0.7467	-0.7516 0.5683	-1.6316 -0.3117			
R5BM1S	-1.1449 0.1749	0.1701 1.4899	-0.7099 0.6099	0.2617 1.5816		
R5BN1S	-1.1783 0.1416	0.1367 1.4566	-0.7433 0.5766	0.2284 1.5483	-0.6933 0.6266	
R5BU1S	-1.3249 -0.0051	-0.0099 1.3099	-0.8899 0.4299	0.0817 1.4016	-0.8399 0.4799	-0.8066 0.5133

R5CM1S	-0.9816	0.3334	-0.5466	0.4251	-0.4966	-0.4633
	0.3383	1.6533	0.7733	1.7449	0.8233	0.8566

	R5BU1S
R5CM1S	-0.3166
	1.0033

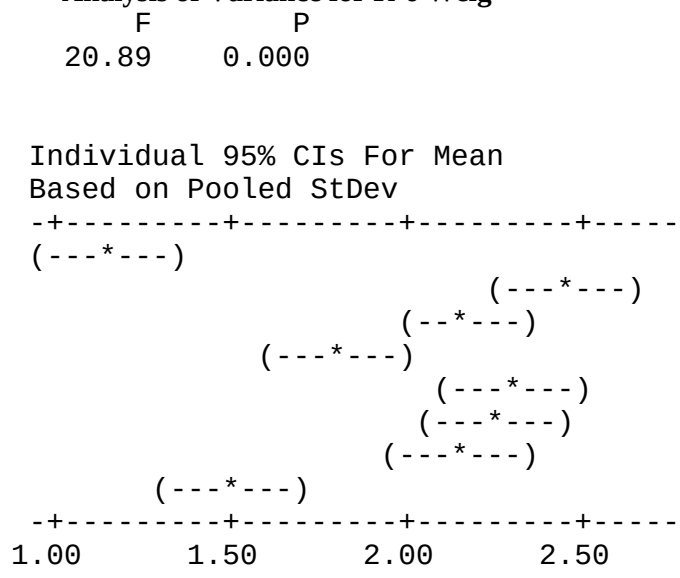
One-way Analysis of Variance

Analysis of Variance for R-6 Weig

Source	DF	SS	MS	F	P
R-6	7	8.4275	1.2039	20.89	0.000
Error	40	2.3049	0.0576		
Total	47	10.7323			

Level	N	Mean	StDev
CONTROL	6	1.1517	0.1804
R6AD1s	6	2.4500	0.1972
R6AM1s	6	2.1750	0.2202
R6AM2s	6	1.7933	0.2408
R6AU1s	6	2.2917	0.1548
R6BM1s	6	2.2350	0.4321
R6BU1s	6	2.1400	0.1322
R6CM1s	6	1.4917	0.2343

Individual 95% CIs For Mean
Based on Pooled StDev



Pooled StDev = 0.2400

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00935

Critical value = 2.73

Control = level (CONTROL) of R-6

Level	Lower	Center	Upper
R6AD1s	0.9198	1.2983	1.6768
R6AM1s	0.6448	1.0233	1.4018
R6AM2s	0.2632	0.6417	1.0202
R6AU1s	0.7615	1.1400	1.5185

```
R6BM1s      0.7048    1.0833    1.4618                (-------*------)
R6BU1s      0.6098    0.9883    1.3668              (-------*------)
R6CM1s     -0.0385    0.3400    0.7185 (-------*------)
                                      -+---------+---------+---------+------
                                    0.00      0.50      1.00      1.50
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00272

Critical value = 4.52

Intervals for (column level mean) - (row level mean)

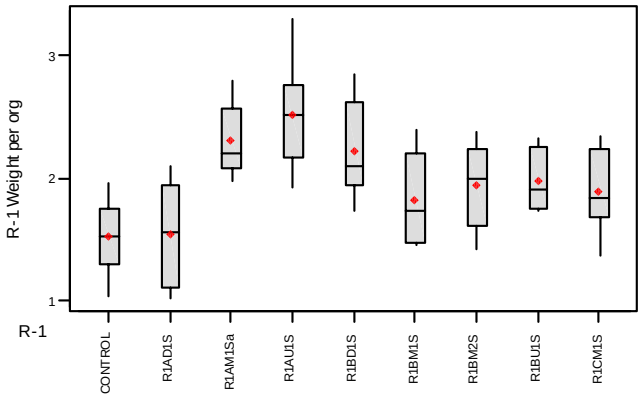
	CONTROL	R6AD1s	R6AM1s	R6AM2s	R6AU1s	R6BM1s
R6AD1s	-1.7413					
	-0.8554					
R6AM1s	-1.4663	-0.1680				
	-0.5804	0.7180				
R6AM2s	-1.0846	0.2137	-0.0613			
	-0.1987	1.0996	0.8246			
R6AU1s	-1.5830	-0.2846	-0.5596	-0.9413		
	-0.6970	0.6013	0.3263	-0.0554		
R6BM1s	-1.5263	-0.2280	-0.5030	-0.8846	-0.3863	
	-0.6404	0.6580	0.3830	0.0013	0.4996	
R6BU1s	-1.4313	-0.1330	-0.4080	-0.7896	-0.2913	-0.3480
	-0.5454	0.7530	0.4780	0.0963	0.5946	0.5380

R6CM1s	-0.7830	0.5154	0.2404	-0.1413	0.3570	0.3004
	0.1030	1.4013	1.1263	0.7446	1.2430	1.1863

	R6BU1s
R6CM1s	0.2054
	1.0913

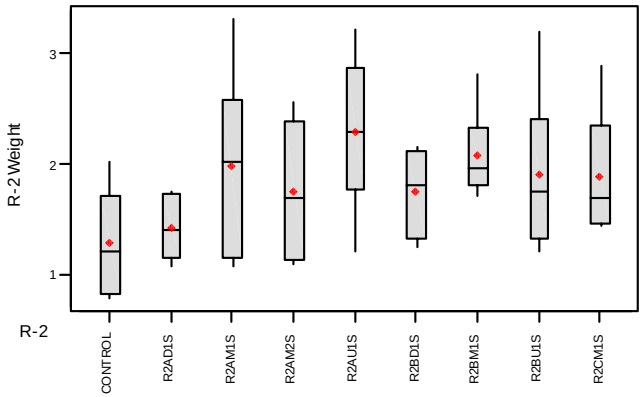
Boxplots of R-1 Weig by R-1

(means are indicated by solid circles)



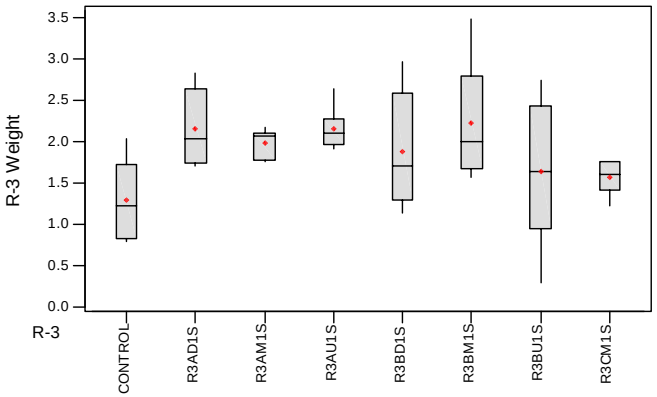
Boxplots of R-2 Weig by R-2

(means are indicated by solid circles)



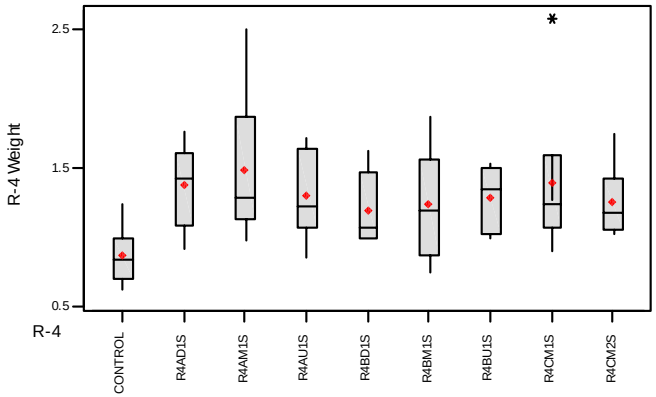
Boxplots of R-3 Weig by R-3

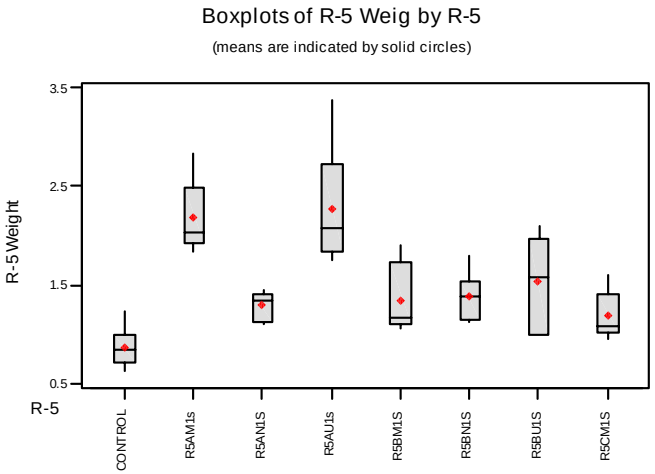
(means are indicated by solid circles)

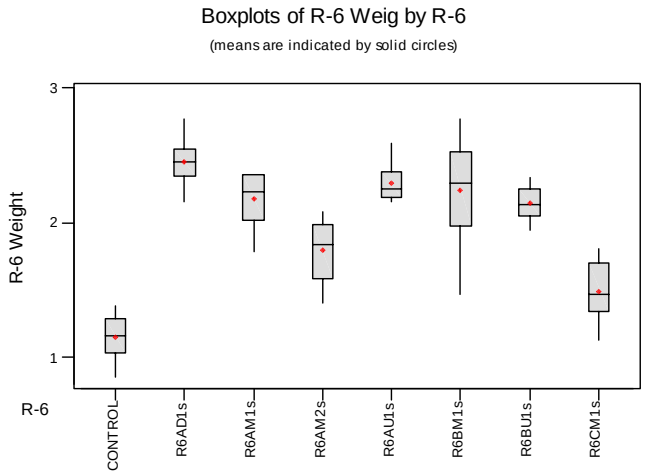


Boxplots of R-4 Weig by R-4

(means are indicated by solid circles)




Boxplots of R-5 Weig by R-5
(means are indicated by solid circles)
R-5 Weight
3.5
2.5
1.5
0.5
R-5
CONTROL
R5AM1s
R5AN1S
R5AU1s
R5BM1S
R5BN1S
R5BU1S
R5CM1S


Boxplots of R-6 Weig by R-6
(means are indicated by solid circles)
R-6 Weight
3
2
1
R-6
CONTROL
R6AD1s
R6AM1s
R6AM2s
R6AU1s
R6BM1s
R6BU1s
R6CM1s

AMEC - Sauget
Site R1
Hyalella Summary Results

Site	Rep	Rand#	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	21	20	100		2.46	0.12	
Beach Sand	B	45	20	100		3.05	0.15	
	C	49	20	100		2.88	0.14	
	D	55	20	100		3.92	0.20	
	E	23	20	100	100	2.59	0.13	0.15
R1AU1S	A	28	19	95		3.30	0.17	
	B	44	19	95		3.30	0.17	
	C	53	20	100		4.47	0.22	
	D	17	20	100		4.54	0.23	
	E	2	20	100	98	2.73	0.14	0.19
R1AD1S	A	19	19	95		3.37	0.18	
	B	16	20	100		2.89	0.14	
	C	29	19	95		2.87	0.15	
	D	46	20	100		2.51	0.13	
	E	13	20	100	98	2.94	0.15	0.15
R1BM2S	A	10	20	100		3.14	0.16	
	B	51	19	95		1.82	0.10	
	C	3	20	100		3.33	0.17	
	D	43	20	100		3.50	0.18	
	E	54	18	90	97	3.17	0.18	0.15
R1CM1S	A	6	20	100		2.92	0.15	
	B	41	20	100		3.05	0.15	
	C	1	18	90		2.45	0.14	
	D	34	18	90		3.58	0.20	
	E	42	20	100	96	3.38	0.17	0.16
R1AM1S	A	5	20	100		2.84	0.14	
	B	35	20	100		2.56	0.13	
	C	25	20	100		3.49	0.17	
	D	15	20	100		3.66	0.18	
	E	37	20	100	100	3.36	0.17	0.16
R1BD1S	A	14	20	100		4.19	0.21	
	B	26	19	95		2.66	0.14	
	C	50	17	85		1.73	0.10	
	D	4	20	100		3.96	0.20	

	E	20	20	100	96	3.79	0.19	0.17

Site	Rep	Rand#	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
R1BM1S	A	24	18	90		2.84	0.16	
	B	11	19	95		3.64	0.19	
	C	36	19	95		2.98	0.16	
	D	40	18	90		3.49	0.19	
	E	52	18	90	92	2.56	0.14	0.17
R1BU1S	A	22	20	100		3.10	0.16	
	B	8	19	95		3.98	0.21	
	C	18	20	100		3.85	0.19	
	D	32	20	100		3.23	0.16	
	E	7	20	100	99	3.23	0.16	0.18

AMEC - Sauget
Site R2
Hyalella Summary Results

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	40	18	90		3.06	0.17	
Beach Sand	B	38	20	100		3.23	0.16	
	C	22	20	100		4.09	0.20	
	D	66	19	95		3.02	0.16	
	E	19	19	95	96	3.12	0.16	0.17
R2BD1S	A	69	18	90		4.19	0.23	
	B	41	20	100		3.54	0.18	
	C	4	20	100		2.70	0.14	
	D	2	20	100		2.94	0.15	
	E	30	19	95	97	3.32	0.17	0.17
R2AD1S	A	26	19	95		3.35	0.18	
	B	62	17	85		3.21	0.19	
	C	64	18	90		2.99	0.17	
	D	55	17	85		0.15	0.01	
	E	1	18	90	89	2.77	0.15	0.14
R2AM2S	A	46	17	85		2.89	0.17	
	B	25	19	95		2.87	0.15	
	C	77	17	85		3.93	0.23	
	D	27	20	100		3.75	0.19	
	E	29	20	100	93	2.72	0.14	0.18
R2BM1S	A	70	19	95		4.28	0.23	
	B	6	20	100		3.13	0.16	
	C	31	20	100		3.55	0.18	
	D	59	18	90		3.08	0.17	
	E	65	20	100	97	2.96	0.15	0.18
R2CM1S	A	74	18	90		3.93	0.22	
	B	43	20	100		3.96	0.20	
	C	36	15	75		1.72	0.11	
	D	24	17	85		2.81	0.17	
	E	12	19	95	89	3.33	0.18	0.17
R2AU1S	A	56	19	95		4.05	0.21	
	B	67	19	95		3.37	0.18	
	C	61	20	100		3.20	0.16	
	D	3	20	100		7.42	0.37	

	E	14	20	100	98	3.04	0.15	0.21

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
R2BU1S	A	16	19	95		2.62	0.14	
	B	23	18	90		3.23	0.18	
	C	11	19	95		4.94	0.26	
	D	10	18	90		4.20	0.23	
	E	28	18	90	92	3.23	0.18	0.20
R2AM1S	A	42	16	80		2.42	0.15	
	B	75	20	100		3.17	0.16	
	C	13	18	90		2.94	0.16	
	D	20	19	95		2.52	0.13	
	E	48	20	100	93	3.89	0.19	0.16

AMEC - Sauget
Site R3
Hyalella Summary Results

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	40	18	90		3.06	0.17	
Beach Sand	B	38	20	100		3.23	0.16	
	C	22	20	100		4.09	0.20	
	D	66	19	95		3.02	0.16	
	E	19	19	95	96	3.12	0.16	0.17
R3AM1S	A	57	20	100		2.71	0.14	
	B	7	20	100		4.24	0.21	
	C	15	20	100		2.77	0.14	
	D	34	19	95		3.55	0.19	
	E	60	20	100	99	3.60	0.18	0.17
R3AD1S	A	54	20	100		3.04	0.15	
	B	53	19	95		2.92	0.15	
	C	37	18	90		3.30	0.18	
	D	72	19	95		2.87	0.15	
	E	33	20	100	96	3.62	0.18	0.16
R3BD1S	A	21	20	100		3.58	0.18	
	B	45	20	100		3.94	0.20	
	C	71	15	75		2.20	0.15	
	D	39	20	100		3.91	0.20	
	E	50	20	100	95	3.02	0.15	0.17
R3BM1S	A	17	20	100		3.16	0.16	
	B	18	20	100		3.50	0.18	
	C	63	20	100		3.56	0.18	
	D	68	17	85		3.78	0.22	
	E	32	19	95	96	2.94	0.15	0.18
R3CM1S	A	49	18	90		2.97	0.16	
	B	5	19	95		3.80	0.20	
	C	51	19	95		2.75	0.14	
	D	58	18	90		3.35	0.19	
	E	35	19	95	93	2.76	0.15	0.17
R3AU1S	A	78	19	95		2.04	0.11	
	B	9	19	95		4.21	0.22	
	C	76	20	100		3.19	0.16	
	D	80	20	100		3.37	0.17	

	E	8	19	95	97	3.49	0.18	0.17

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
R3BU1S	A	73	20	100		2.94	0.15	
	B	47	14	70		1.27	0.09	
	C	44	20	100		3.18	0.16	
	D	79	20	100		4.02	0.20	
	E	52	20	100	94	3.94	0.20	0.16

AMEC - Sauget
Site R4
Hyalella Summary Results

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	51	19	95		4.49	0.24	
Beach Sand	B	49	20	100		3.37	0.17	
	C	25	20	100		3.60	0.18	
	D	36	20	100		4.39	0.22	
	E	53	17	85	96	4.48	0.26	0.21
R4BD1S	A	39	19	95		4.95	0.26	
	B	65	20	100		5.05	0.25	
	C	9	19	95		4.92	0.26	
	D	42	19	95		3.65	0.19	
	E	66	20	100	97	4.61	0.23	0.24
R4AM1S	A	45	20	100		4.56	0.23	
	B	40	19	95		5.10	0.27	
	C	28	19	95		5.61	0.30	
	D	64	19	95		6.87	0.36	
	E	52	20	100	97	5.82	0.29	0.29
R4AD1S	A	3	19	95		4.02	0.21	
	B	61	19	95		4.05	0.21	
	C	54	20	100		4.41	0.22	
	D	70	20	100		5.18	0.26	
	E	27	19	95	97	5.64	0.30	0.24
R4CM2S	A	60	19	95		5.33	0.28	
	B	38	20	100		6.46	0.32	
	C	8	18	90		3.81	0.21	
	D	50	18	90		5.41	0.30	
	E	24	20	100	95	5.54	0.28	0.28
R4BM1S	A	2	20	100		5.46	0.27	
	B	68	20	100		4.74	0.24	
	C	13	20	100		4.76	0.24	
	D	48	20	100		4.30	0.21	
	E	32	20	100	100	5.11	0.26	0.24
R4AU1S	A	33	20	100		5.50	0.27	
	B	67	20	100		4.73	0.24	
	C	11	18	90		5.03	0.28	
	D	14	19	95		4.87	0.26	

	E	30	20	100	97	4.69	0.23	0.26

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
R4CM1S	A	62	17	85		3.74	0.22	
	B	21	20	100		5.12	0.26	
	C	31	19	95		5.68	0.30	
	D	29	20	100		5.77	0.29	
	E	47	19	95	95	4.17	0.22	0.26
R4BU1S	A	10	19	95		4.76	0.25	
	B	63	19	95		5.25	0.28	
	C	41	20	100		4.72	0.24	
	D	69	19	95		5.07	0.27	
	E	5	19	95	96	5.25	0.28	0.26

AMEC -Sauget
Site R5
Hyalella Summary Results

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	51	19	95		4.49	0.24	
Beach Sand	B	49	20	100		3.37	0.17	
	C	25	20	100		3.60	0.18	
	D	36	20	100		4.39	0.22	
	E	53	17	85	96	4.48	0.26	0.21
R5BM1S	A	55	19	95		5.66	0.30	
	B	34	20	100		5.32	0.27	
	C	56	19	95		5.07	0.27	
	D	22	20	100		5.46	0.27	
	E	26	20	100	98	5.16	0.26	0.27
R5CM1S	A	4	20	100		3.75	0.19	
	B	15	20	100		5.58	0.28	
	C	35	19	95		4.98	0.26	
	D	6	20	100		5.94	0.30	
	E	16	19	95	98	4.16	0.22	0.25
R5BU1S	A	7	20	100		4.04	0.20	
	B	23	17	85		4.47	0.26	
	C	43	20	100		4.13	0.21	
	D	44	19	95		5.13	0.27	
	E	58	18	90	94	4.99	0.28	0.24
R5BN1S	A	37	20	100		5.99	0.30	
	B	18	20	100		5.37	0.27	
	C	57	20	100		5.69	0.28	
	D	12	19	95		4.72	0.25	
	E	19	20	100	99	5.79	0.29	0.28
R5AN1S	A	46	19	95		4.78	0.25	
	B	17	20	100		5.77	0.29	
	C	1	18	90		4.63	0.26	
	D	20	20	100		4.85	0.24	
	E	59	20	100	97	5.11	0.26	0.26
R5AU1s	A	5	20	100		4.58	0.23	
	B	43	20	100		4.38	0.22	
	C	22	20	100		5.08	0.25	
	D	1	20	100		5.50	0.27	

	E	29	20	100	100	5.79	0.29	0.25

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
R5AM1s	A	47	20	100		4.14	0.21	
	B	18	18	90		4.43	0.25	
	C	25	20	100		4.92	0.25	
	D	17	20	100		4.77	0.24	
	E	44	18	90	96	3.55	0.20	0.23

AMEC - Sauget
Site R6
Hyalella Summary Results

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	6	20	100		4.45	0.22	
Beach Sand	B	20	20	100		3.49	0.17	
	C	15	20	100		3.75	0.19	
	D	38	20	100		3.29	0.16	
	E	31	19	95	99	4.96	0.26	0.20
R6AM1s	A	40	20	100		3.49	0.17	
	B	35	20	100		4.86	0.24	
	C	3	20	100		3.61	0.18	
	D	41	18	90		4.04	0.22	
	E	27	20	100	98	4.42	0.22	0.21
R6BM1s	A	36	19	95		5.00	0.26	
	B	34	20	100		5.04	0.25	
	C	23	20	100		5.41	0.27	
	D	50	19	95		4.45	0.23	
	E	11	20	100	98	4.57	0.23	0.25
R6CM1s	A	30	20	100		4.57	0.23	
	B	21	20	100		6.26	0.31	
	C	9	20	100		4.91	0.25	
	D	19	19	95		4.54	0.24	
	E	24	19	95	98	4.35	0.23	0.25
R6AM2s	A	14	19	95		3.86	0.20	
	B	42	20	100		5.06	0.25	
	C	33	20	100		5.07	0.25	
	D	12	19	95		4.35	0.23	
	E	28	15	75	93	3.86	0.26	0.24
R6AU1s	A	37	20	100		3.78	0.19	
	B	39	20	100		4.33	0.22	
	C	7	20	100		4.20	0.21	
	D	4	20	100		4.33	0.22	
	E	10	20	100	100	4.22	0.21	0.21
R6AD1s	A	45	20	100		4.57	0.23	
	B	16	19	95		4.59	0.24	
	C	13	20	100		4.68	0.23	
	D	49	20	100		4.31	0.22	
	E	46	19	95	98	4.32	0.23	0.23

Site	Rep	Rand #	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
R6BU1s	A	8	20	100		4.72	0.24	
	B	48	20	100		3.98	0.20	
	C	2	19	95		4.54	0.24	
	D	32	20	100		5.09	0.25	
	E	26	20	100	99	5.64	0.28	0.24

One-way Analysis of Variance

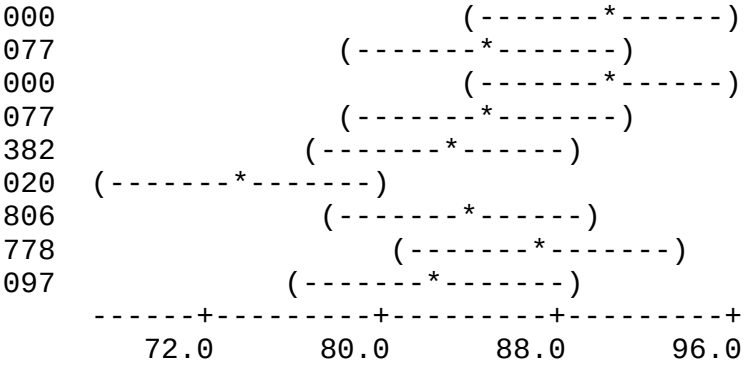
Analysis of Variance for R-1

Source	DF	SS	MS	F	P
R-1	8	955.6	119.5	2.50	0.029
Error	36	1719.9	47.8		
Total	44	2675.5			

Level	N	Mean	StDev
CONTROL	5	90.000	0.000
R1AD1S	5	84.832	7.077
R1AM1S	5	90.000	0.000
R1AU1S	5	84.832	7.077
R1BD1S	5	82.859	10.382
R1BM1S	5	73.771	3.020
R1BM2S	5	83.729	8.806
R1BU1S	5	87.416	5.778
R1CM1S	5	82.626	10.097

Pooled StDev = 6.912

Individual 95% CIs For Mean Based on Pooled StDev



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00841

Critical value = 2.79

Control = level (CONTROL) of R-1

Level	Lower	Center	Upper
R1AD1S	-17.357	-5.168	7.021
R1AM1S	-12.189	0.000	12.189

```
R1AU1S     -17.357    -5.168     7.021           (---------*---------)
R1BD1S     -19.331    -7.141     5.048         (---------*---------)
R1BM1S     -28.418   -16.229    -4.040 (---------*----------)
R1BM2S     -18.460    -6.271     5.918          (---------*---------)
R1BU1S     -14.773    -2.584     9.605            (---------*---------)
R1CM1S     -19.563    -7.374     4.815         (---------*---------)
                                      ----+---------+---------+---------+---
                                        -24       -12         0        12
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00222

Critical value = 4.66

Intervals for (column level mean) - (row level mean)

	CONTROL	R1AD1S	R1AM1S	R1AU1S	R1BD1S	R1BM1S
R1AD1S	-9.24 19.57					
R1AM1S	-14.40 14.40	-19.57 9.24				
R1AU1S	-9.24 19.57	-14.40 14.40	-9.24 19.57			
R1BD1S	-7.26 21.55	-12.43 16.38	-7.26 21.55	-12.43 16.38		
R1BM1S	1.82	-3.34	1.82	-3.34	-5.32	

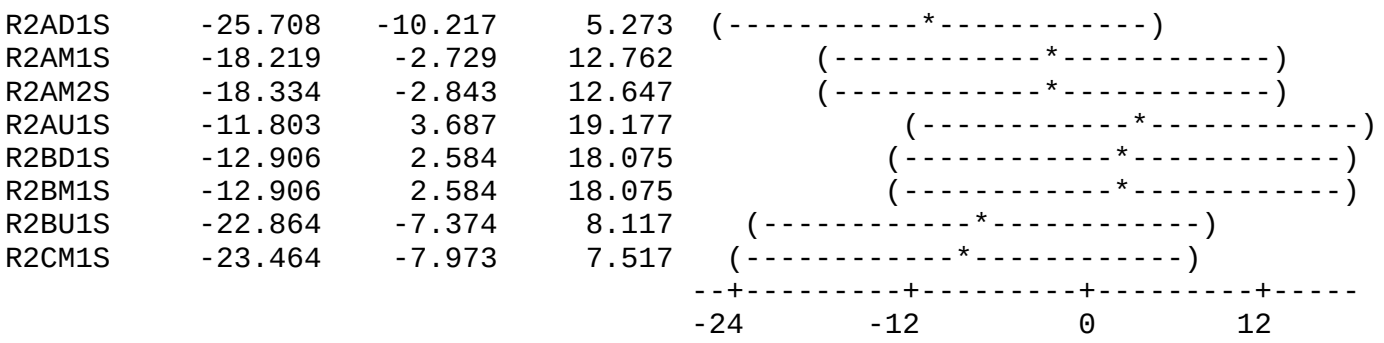
	30.63	25.47	30.63	25.47	23.49	
R1BM2S	-8.13	-13.30	-8.13	-13.30	-15.27	-24.36
	20.68	15.51	20.68	15.51	13.53	4.45
R1BU1S	-11.82	-16.99	-11.82	-16.99	-18.96	-28.05
	16.99	11.82	16.99	11.82	9.85	0.76
R1CM1S	-7.03	-12.20	-7.03	-12.20	-14.17	-23.26
	21.78	16.61	21.78	16.61	14.64	5.55

	R1BM2S	R1BU1S
R1BU1S	-18.09	
	10.72	
R1CM1S	-13.30	-9.61
	15.51	19.19

One-way Analysis of Variance

Analysis of Variance for R-2

```
Source     DF        SS        MS        F        P
R-2         8    1048.3     131.0     1.70    0.133
Error      36    2777.7      77.2
Total      44    3826.0
                                 Individual 95% CIs For Mean
                                 Based on Pooled StDev
Level       N      Mean     StDev  --------+---------+---------+--------
CONTROL     5    81.145     8.391            (-------*-------)
R2AD1S      5    70.927     4.069   (-------*-------)
R2AM1S      5    78.416    11.635          (-------*-------)
R2AM2S      5    78.301    11.414          (-------*-------)
R2AU1S      5    84.832     7.077                  (-------*-------)
R2BD1S      5    83.729     8.806                (-------*-------)
R2BM1S      5    83.729     8.806                (-------*-------)
R2BU1S      5    73.771     3.020      (-------*-------)
R2CM1S      5    73.172    11.292     (-------*-------)
                                 --------+---------+---------+--------
Pooled StDev =    8.784                 70        80        90

Dunnett's intervals for treatment mean minus control mean

    Family error rate = 0.0500
Individual error rate = 0.00841

Critical value = 2.79

Control = level (CONTROL) of R-2

Level        Lower    Center     Upper --+---------+---------+---------+-----
```



Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00222

Critical value = 4.66

Intervals for (column level mean) - (row level mean)

	CONTROL	R2AD1S	R2AM1S	R2AM2S	R2AU1S	R2BD1S
R2AD1S	-8.09 28.52					
R2AM1S	-15.58 21.03	-25.79 10.82				
R2AM2S	-15.46 21.15	-25.68 10.93	-18.19 18.42			
R2AU1S	-21.99 14.62	-32.21 4.40	-24.72 11.89	-24.84 11.78		

R2BD1S	-20.89	-31.11	-23.62	-23.73	-17.20	
	15.72	5.50	12.99	12.88	19.41	
R2BM1S	-20.89	-31.11	-23.62	-23.73	-17.20	-18.31
	15.72	5.50	12.99	12.88	19.41	18.31
R2BU1S	-10.93	-21.15	-13.66	-13.78	-7.25	-8.35
	25.68	15.46	22.95	22.84	29.37	28.26
R2CM1S	-10.33	-20.55	-13.06	-13.18	-6.65	-7.75
	26.28	16.06	23.55	23.44	29.97	28.86

	R2BM1S	R2BU1S
R2BU1S	-8.35	
	28.26	
R2CM1S	-7.75	-17.71
	28.86	18.91

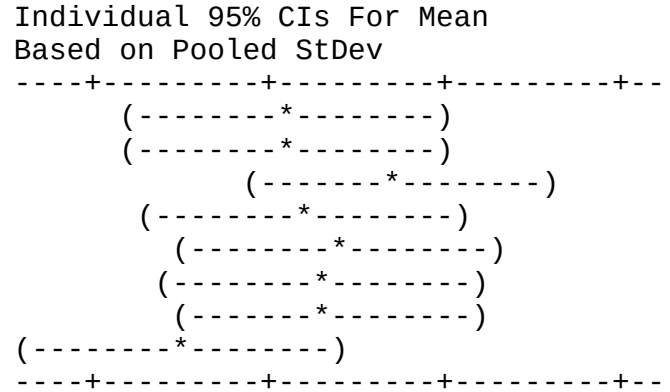
One-way Analysis of Variance

Analysis of Variance for R-3

Source	DF	SS	MS	F	P
R-3	7	440.4	62.9	0.68	0.689
Error	32	2967.3	92.7		
Total	39	3407.7			

Level	N	Mean	StDev
CONTROL	5	81.145	8.391
R3AD1S	5	81.145	8.391
R3AM1S	5	87.416	5.778
R3AU1S	5	82.247	7.077
R3BD1S	5	84.000	13.416
R3BM1S	5	82.859	10.382
R3BU1S	5	83.358	14.852
R3CM1S	5	74.873	3.020

Pooled StDev = 9.629



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00944

Critical value = 2.76

Control = level (CONTROL) of R-3

Level	Lower	Center	Upper
R3AD1S	-16.820	0.000	16.820
R3AM1S	-10.549	6.271	23.091
R3AU1S	-15.717	1.103	17.923

```
R3BD1S     -13.965     2.855    19.675        (----------*----------)
R3BM1S     -15.106     1.714    18.534       (----------*----------)
R3BU1S     -14.607     2.213    19.033       (----------*-----------)
R3CM1S     -23.091    -6.271    10.549  (----------*----------)
                                       ------+---------+---------+---------+-
                                           -15         0        15        30
```

Tukey's pairwise comparisons

```
    Family error rate = 0.0500
Individual error rate = 0.00280
```

Critical value = 4.58

Intervals for (column level mean) - (row level mean)

	CONTROL	R3AD1S	R3AM1S	R3AU1S	R3BD1S	R3BM1S
R3AD1S	-19.72 19.72					
R3AM1S	-25.99 13.45	-25.99 13.45				
R3AU1S	-20.83 18.62	-20.83 18.62	-14.56 24.89			
R3BD1S	-22.58 16.87	-22.58 16.87	-16.31 23.14	-21.48 17.97		
R3BM1S	-21.44 18.01	-21.44 18.01	-15.17 24.28	-20.33 19.11	-18.58 20.86	

R3BU1S	-21.94 17.51	-21.94 17.51	-15.67 23.78	-20.83 18.61	-19.08 20.37	-20.22 19.22
R3CM1S	-13.45 25.99	-13.45 25.99	-7.18 32.27	-12.35 27.10	-10.60 28.85	-11.74 27.71

	R3BU1S
R3CM1S	-11.24 28.21

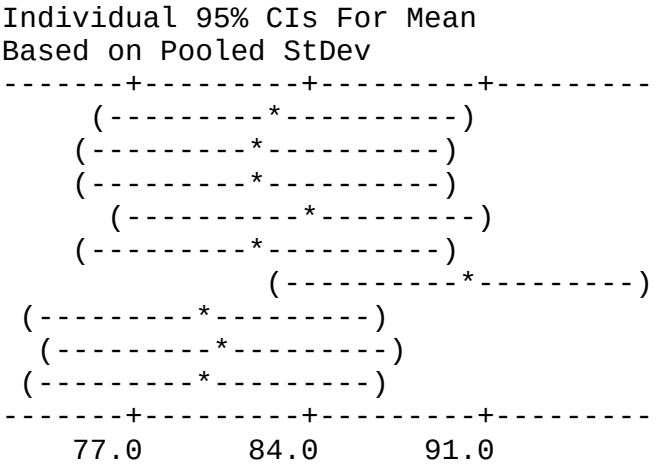
One-way Analysis of Variance

Analysis of Variance for R-4

Source	DF	SS	MS	F	P
R-4	8	385.3	48.2	0.79	0.618
Error	36	2206.9	61.3		
Total	44	2592.2			

Level	N	Mean	StDev
CONTROL	5	82.859	10.382
R4AD1S	5	82.247	7.077
R4AM1S	5	82.247	7.077
R4AU1S	5	83.729	8.806
R4BD1S	5	82.247	7.077
R4BM1S	5	90.000	0.000
R4BU1S	5	79.663	5.778
R4CM1S	5	80.274	9.749
R4CM2S	5	80.042	9.365

Individual 95% CIs For Mean Based on Pooled StDev



Pooled StDev = 7.830

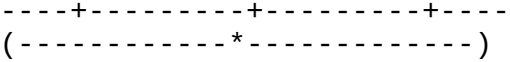
Dunnett's intervals for treatment mean minus control mean

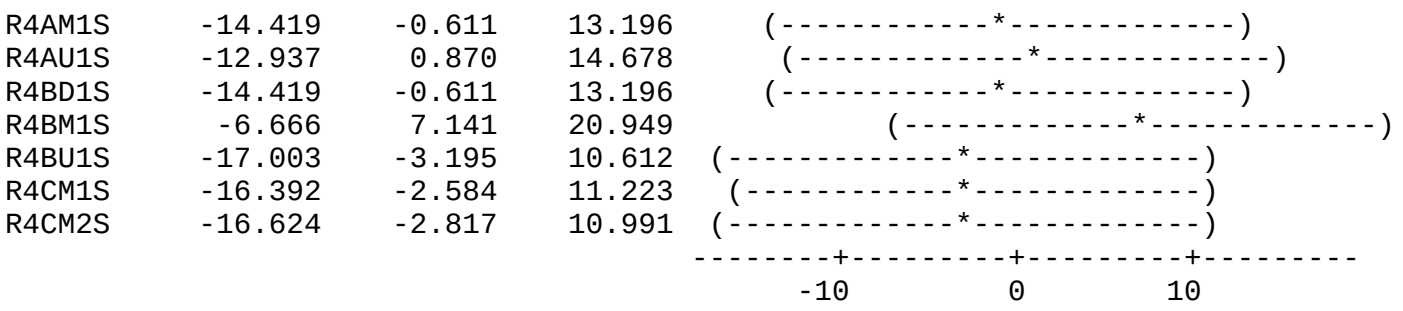
Family error rate = 0.0500
Individual error rate = 0.00841

Critical value = 2.79

Control = level (CONTROL) of R-4

Level	Lower	Center	Upper
R4AD1S	-14.419	-0.611	13.196





Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00222

Critical value = 4.66

Intervals for (column level mean) - (row level mean)

	CONTROL	R4AD1S	R4AM1S	R4AU1S	R4BD1S	R4BM1S
R4AD1S	-15.71 16.93					
R4AM1S	-15.71 16.93	-16.32 16.32				
R4AU1S	-17.19 15.45	-17.80 14.84	-17.80 14.84			
R4BD1S	-15.71 16.93	-16.32 16.32	-16.32 16.32	-14.84 17.80		

R4BM1S	-23.46	-24.07	-24.07	-22.59	-24.07	
	9.18	8.56	8.56	10.05	8.56	
R4BU1S	-13.12	-13.73	-13.73	-12.25	-13.73	-5.98
	19.51	18.90	18.90	20.38	18.90	26.65
R4CM1S	-13.73	-14.34	-14.34	-12.86	-14.34	-6.59
	18.90	18.29	18.29	19.77	18.29	26.04
R4CM2S	-13.50	-14.11	-14.11	-12.63	-14.11	-6.36
	19.13	18.52	18.52	20.00	18.52	26.28

	R4BU1S	R4CM1S
R4CM1S	-16.93	
	15.71	
R4CM2S	-16.70	-16.08
	15.94	16.55

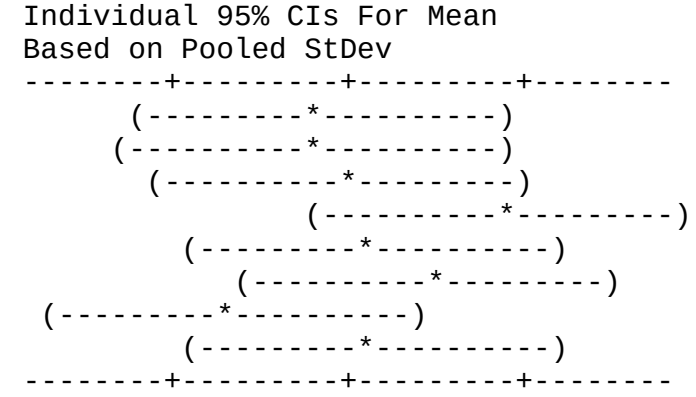
One-way Analysis of Variance

Analysis of Variance for R-5

Source	DF	SS	MS	F	P
R-5	7	370.6	52.9	0.80	0.595
Error	32	2123.1	66.3		
Total	39	2493.8			

Level	N	Mean	StDev
CONTROL	5	82.859	10.382
R5AM1s	5	82.626	10.097
R5AN1S	5	83.729	8.806
R5AU1s	5	90.000	0.000
R5BM1S	5	84.832	7.077
R5BN1S	5	87.416	5.778
R5BU1S	5	79.172	10.485
R5CM1S	5	84.832	7.077

Pooled StDev = 8.145



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00944

Critical value = 2.76

Control = level (CONTROL) of R-5

Level	Lower	Center	Upper
R5AM1s	-14.460	-0.232	13.995
R5AN1S	-13.357	0.870	15.098

```
R5AU1s      -7.086     7.141    21.369          (-----------*-----------)
R5BM1S     -12.255     1.973    16.201      (-----------*-----------)
R5BN1S      -9.670     4.557    18.785        (-----------*-----------)
R5BU1S     -17.915    -3.687    10.541 (-----------*-----------)
R5CM1S     -12.255     1.973    16.201      (-----------*-----------)
                                       -----+---------+---------+---------+--
                                          -12         0        12        24
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00280

Critical value = 4.58

Intervals for (column level mean) - (row level mean)

	CONTROL	R5AM1s	R5AN1S	R5AU1s	R5BM1S	R5BN1S
R5AM1s	-16.45 16.92					
R5AN1S	-17.55 15.81	-17.79 15.58				
R5AU1s	-23.83 9.54	-24.06 9.31	-22.95 10.41			
R5BM1S	-18.66 14.71	-18.89 14.48	-17.79 15.58	-11.52 21.85		
R5BN1S	-21.24 12.13	-21.47 11.89	-20.37 13.00	-14.10 19.27	-19.27 14.10	

R5BU1S	-13.00	-13.23	-12.13	-5.86	-11.02	-8.44
	20.37	20.14	21.24	27.51	22.34	24.93
R5CM1S	-18.66	-18.89	-17.79	-11.52	-16.68	-14.10
	14.71	14.48	15.58	21.85	16.68	19.27

	R5BU1S
R5CM1S	-22.34
	11.02

One-way Analysis of Variance

Analysis of Variance for R-6

Source	DF	SS	MS	F	P
R-6	7	370.2	52.9	0.97	0.472
Error	32	1750.3	54.7		
Total	39	2120.4			

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
CONTROL	5	87.416	5.778	(---------*---------)
R6AD1s	5	84.832	7.077	(--------*---------)
R6AM1s	5	86.313	8.244	(--------*---------)
R6AM2s	5	78.832	12.352	(---------*--------)
R6AU1s	5	90.000	0.000	(---------*--------)
R6BM1s	5	84.832	7.077	(--------*---------)
R6BU1s	5	87.416	5.778	(---------*---------)
R6CM1s	5	84.832	7.077	(--------*---------)

Pooled StDev = 7.396 — 77.0 — 84.0 — 91.0

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00944

Critical value = 2.76

Control = level (CONTROL) of R-6

Level	Lower	Center	Upper	--+---------+---------+---------+-----
R6AD1s	-15.502	-2.584	10.334	(------------*------------)
R6AM1s	-14.021	-1.103	11.815	(------------*------------)

```
R6AM2s     -21.502    -8.584     4.334 (------------*------------)
R6AU1s     -10.334     2.584    15.502              (------------*------------)
R6BM1s     -15.502    -2.584    10.334       (------------*------------)
R6BU1s     -12.918     0.000    12.918          (------------*------------)
R6CM1s     -15.502    -2.584    10.334       (------------*------------)
                                       --+---------+---------+---------+-----
                                       -20       -10         0        10
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00280

Critical value = 4.58

Intervals for (column level mean) - (row level mean)

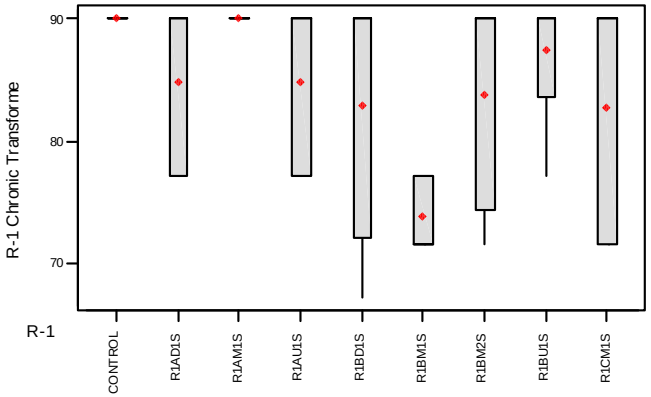
	CONTROL	R6AD1s	R6AM1s	R6AM2s	R6AU1s	R6BM1s
R6AD1s	-12.56 17.73					
R6AM1s	-14.05 16.25	-16.63 13.67				
R6AM2s	-6.56 23.73	-9.15 21.15	-7.67 22.63			
R6AU1s	-17.73 12.56	-20.32 9.98	-18.84 11.46	-26.32 3.98		
R6BM1s	-12.56 17.73	-15.15 15.15	-13.67 16.63	-21.15 9.15	-9.98 20.32	

R6BU1s	-15.15	-17.73	-16.25	-23.73	-12.56	-17.73
	15.15	12.56	14.05	6.56	17.73	12.56
R6CM1s	-12.56	-15.15	-13.67	-21.15	-9.98	-15.15
	17.73	15.15	16.63	9.15	20.32	15.15

	R6BU1s
R6CM1s	-12.56
	17.73

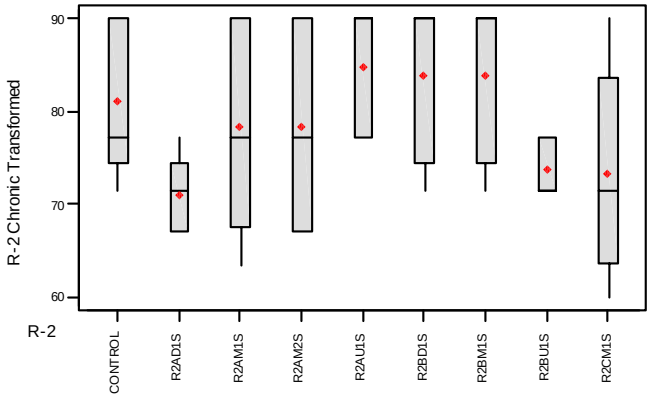
Boxplots of R-1 Hyalella Survival

(means are indicated by solid circles)



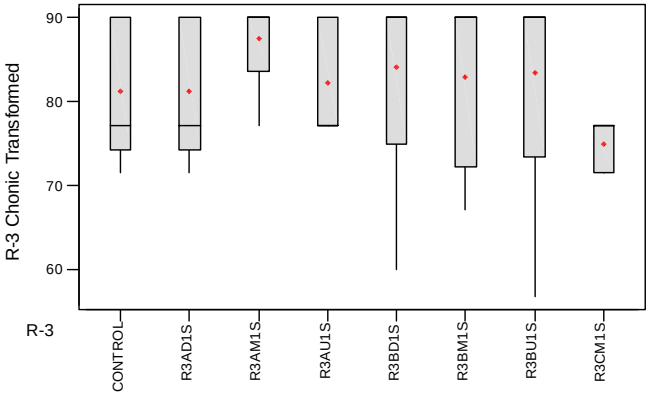
Boxplots of R-2 Hyalella Survival

(means are indicated by solid circles)



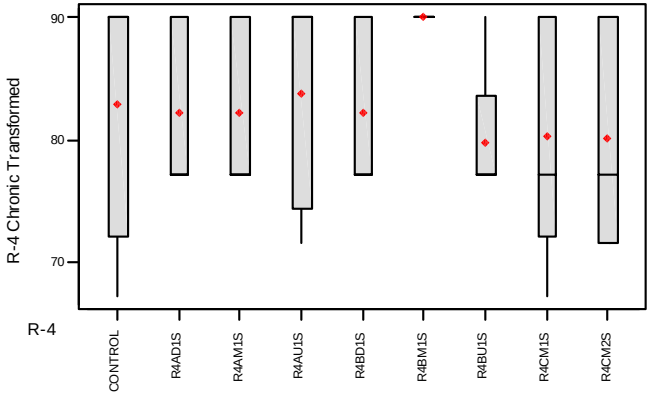
Boxplots of R-3 Hyalella Survival

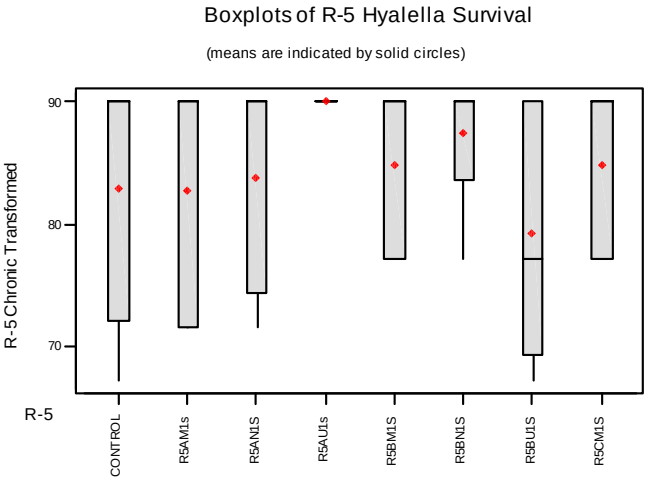
(means are indicated by solid circles)

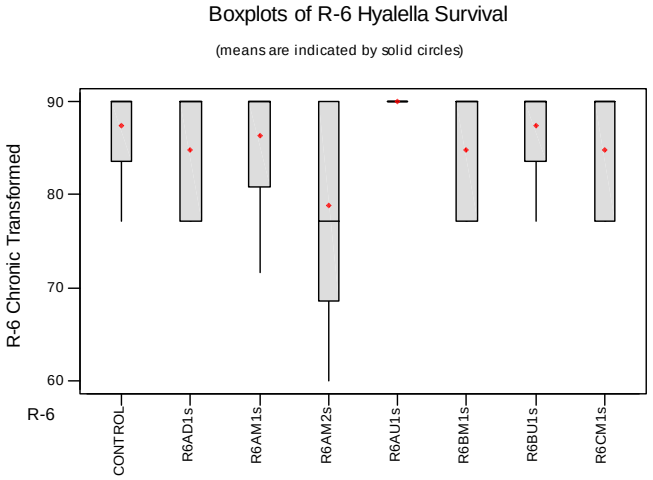


Boxplots of R-4 Hyalella Survival

(means are indicated by solid circles)




Boxplots of R-5 Hyalella Survival
(means are indicated by solid circles)
R-5 Chronic Transformed
90
80
70
R-5
CONTROL
R5AM1s
R5AN1S
R5AU1s
R5BM1S
R5BN1S
R5BU1S
R5CM1S


Boxplots of R-6 Hyalella Survival
(means are indicated by solid circles)
R-6 Chronic Transformed
90
80
70
60
R-6
CONTROL
R6AD1s
R6AM1s
R6AM2s
R6AU1s
R6BM1s
R6BU1s
R6CM1s

******HYALELLA AZTECA GROWTH ANALYSIS**********

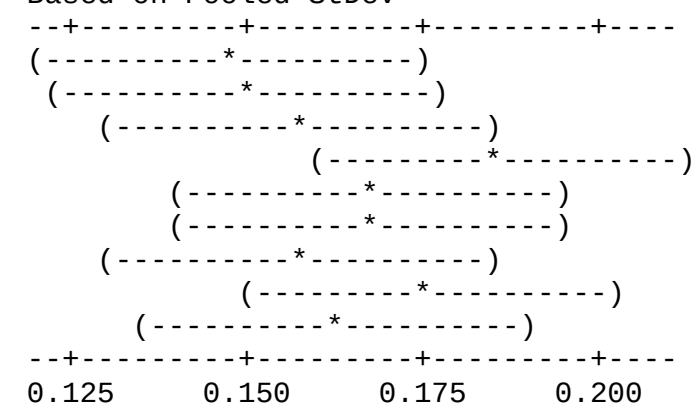
One-way Analysis of Variance

Analysis of Variance for R-1 Weig

Source	DF	SS	MS	F	P
R-1	8	0.005938	0.000742	0.83	0.585
Error	36	0.032320	0.000898		
Total	44	0.038258			

Level	N	Mean	StDev
CONTROL	5	0.14800	0.03114
R1AD1S	5	0.15000	0.01871
R1AM1S	5	0.15800	0.02168
R1AU1S	5	0.18600	0.03782
R1BD1S	5	0.16800	0.04658
R1BM1S	5	0.16800	0.02168
R1BM2S	5	0.15800	0.03347
R1BU1S	5	0.17600	0.02302
R1CM1S	5	0.16200	0.02387

Pooled StDev = 0.02996



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00841

Critical value = 2.79

Control = level (CONTROL) of R-1

Level	Lower	Center	Upper

```
R1AD1S    -0.05084   0.00200   0.05484 (-------------*------------)
R1AM1S    -0.04284   0.01000   0.06284   (-------------*-------------)
R1AU1S    -0.01484   0.03800   0.09084           (-------------*-------------)
R1BD1S    -0.03284   0.02000   0.07284       (------------*------------)
R1BM1S    -0.03284   0.02000   0.07284       (------------*------------)
R1BM2S    -0.04284   0.01000   0.06284   (-------------*-------------)
R1BU1S    -0.02484   0.02800   0.08084        (------------*------------)
R1CM1S    -0.03884   0.01400   0.06684    (-------------*-------------)
                                       ---+---------+---------+---------+----
                                       -0.040     0.000     0.040     0.080


Tukey's pairwise comparisons

    Family error rate = 0.0500
Individual error rate = 0.00222

Critical value = 4.66

Intervals for (column level mean) - (row level mean)

           CONTROL     R1AD1S      R1AM1S      R1AU1S      R1BD1S      R1BM1S

 R1AD1S     -0.06444
             0.06044

 R1AM1S     -0.07244    -0.07044
             0.05244     0.05444

 R1AU1S     -0.10044    -0.09844    -0.09044
             0.02444     0.02644     0.03444

 R1BD1S     -0.08244    -0.08044    -0.07244    -0.04444
             0.04244     0.04444     0.05244     0.08044

 R1BM1S     -0.08244    -0.08044    -0.07244    -0.04444    -0.06244
```

	0.04244	0.04444	0.05244	0.08044	0.06244	
R1BM2S	-0.07244	-0.07044	-0.06244	-0.03444	-0.05244	-0.05244
	0.05244	0.05444	0.06244	0.09044	0.07244	0.07244
R1BU1S	-0.09044	-0.08844	-0.08044	-0.05244	-0.07044	-0.07044
	0.03444	0.03644	0.04444	0.07244	0.05444	0.05444
R1CM1S	-0.07644	-0.07444	-0.06644	-0.03844	-0.05644	-0.05644
	0.04844	0.05044	0.05844	0.08644	0.06844	0.06844

	R1BM2S	R1BU1S
R1BU1S	-0.08044	
	0.04444	
R1CM1S	-0.06644	-0.04844
	0.05844	0.07644

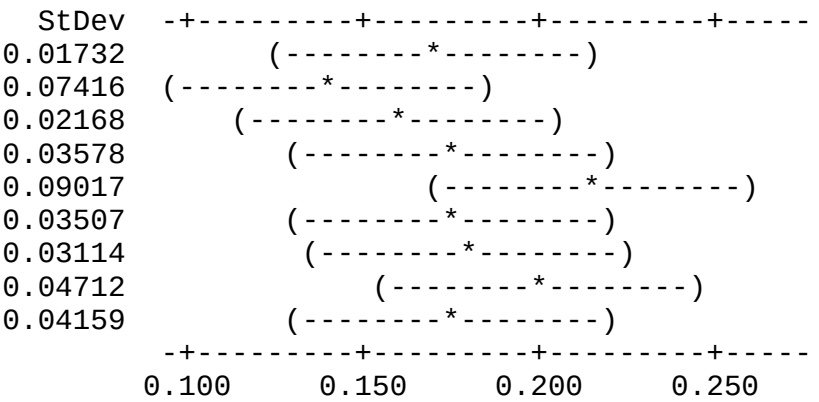
One-way Analysis of Variance

Analysis of Variance for R-2 Weig

Source	DF	SS	MS	F	P
R-2	8	0.01796	0.00225	0.93	0.507
Error	36	0.08732	0.00243		
Total	44	0.10528			

Level	N	Mean	StDev
CONTROL	5	0.17000	0.01732
R2AD1S	5	0.14000	0.07416
R2AM1S	5	0.15800	0.02168
R2AM2S	5	0.17600	0.03578
R2AU1S	5	0.21400	0.09017
R2BD1S	5	0.17400	0.03507
R2BM1S	5	0.17800	0.03114
R2BU1S	5	0.19800	0.04712
R2CM1S	5	0.17600	0.04159

Individual 95% CIs For Mean Based on Pooled StDev



Pooled StDev = 0.04925

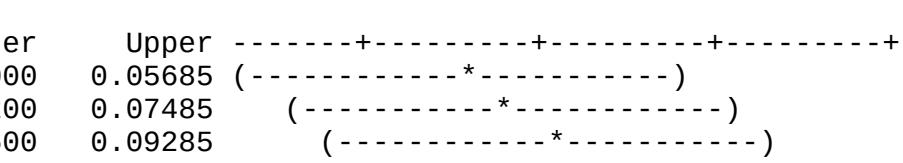
Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00841

Critical value = 2.79

Control = level (CONTROL) of R-2

Level	Lower	Center	Upper
R2AD1S	-0.11685	-0.03000	0.05685
R2AM1S	-0.09885	-0.01200	0.07485
R2AM2S	-0.08085	0.00600	0.09285



```
R2AU1S    -0.04285   0.04400   0.13085            (-----------*-----------)
R2BD1S    -0.08285   0.00400   0.09085      (------------*-----------)
R2BM1S    -0.07885   0.00800   0.09485       (-----------*------------)
R2BU1S    -0.05885   0.02800   0.11485          (-----------*-----------)
R2CM1S    -0.08085   0.00600   0.09285      (------------*-----------)
                                      -------+---------+---------+---------+
                                          -0.070     0.000     0.070     0.140
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00222

Critical value = 4.66

Intervals for (column level mean) - (row level mean)

	CONTROL	R2AD1S	R2AM1S	R2AM2S	R2AU1S	R2BD1S
R2AD1S	-0.07264 0.13264					
R2AM1S	-0.09064 0.11464	-0.12064 0.08464				
R2AM2S	-0.10864 0.09664	-0.13864 0.06664	-0.12064 0.08464			
R2AU1S	-0.14664 0.05864	-0.17664 0.02864	-0.15864 0.04664	-0.14064 0.06464		
R2BD1S	-0.10664 0.09864	-0.13664 0.06864	-0.11864 0.08664	-0.10064 0.10464	-0.06264 0.14264	
R2BM1S	-0.11064	-0.14064	-0.12264	-0.10464	-0.06664	-0.10664

	0.09464	0.06464	0.08264	0.10064	0.13864	0.09864
R2BU1S	-0.13064	-0.16064	-0.14264	-0.12464	-0.08664	-0.12664
	0.07464	0.04464	0.06264	0.08064	0.11864	0.07864
R2CM1S	-0.10864	-0.13864	-0.12064	-0.10264	-0.06464	-0.10464
	0.09664	0.06664	0.08464	0.10264	0.14064	0.10064

	R2BM1S	R2BU1S
R2BU1S	-0.12264	
	0.08264	
R2CM1S	-0.10064	-0.08064
	0.10464	0.12464

One-way Analysis of Variance

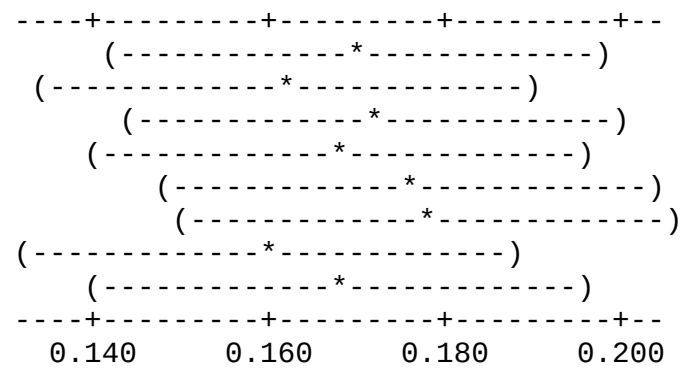
Analysis of Variance for R-3 Weig

Source	DF	SS	MS	F	P
R-3	7	0.001358	0.000194	0.22	0.979
Error	32	0.028720	0.000897		
Total	39	0.030078			

Level	N	Mean	StDev
CONTROL	5	0.17000	0.01732
R3AD1S	5	0.16200	0.01643
R3AM1S	5	0.17200	0.03114
R3AU1S	5	0.16800	0.03962
R3BD1S	5	0.17600	0.02510
R3BM1S	5	0.17800	0.02683
R3BU1S	5	0.16000	0.04528
R3CM1S	5	0.16800	0.02588

Pooled StDev = 0.02996

Individual 95% CIs For Mean Based on Pooled StDev



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00944

Critical value = 2.76

Control = level (CONTROL) of R-3

Level	Lower	Center	Upper
R3AD1S	-0.06033	-0.00800	0.04433
R3AM1S	-0.05033	0.00200	0.05433
R3AU1S	-0.05433	-0.00200	0.05033
R3BD1S	-0.04633	0.00600	0.05833

```
R3BM1S    -0.04433   0.00800   0.06033      (--------------*--------------)
R3BU1S    -0.06233  -0.01000   0.04233 (--------------*--------------)
R3CM1S    -0.05433  -0.00200   0.05033   (--------------*--------------)
                                       --------+---------+---------+---------
                                            -0.035     0.000     0.035
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00280

Critical value = 4.58

Intervals for (column level mean) - (row level mean)

	CONTROL	R3AD1S	R3AM1S	R3AU1S	R3BD1S	R3BM1S
R3AD1S	-0.05336 0.06936					
R3AM1S	-0.06336 0.05936	-0.07136 0.05136				
R3AU1S	-0.05936 0.06336	-0.06736 0.05536	-0.05736 0.06536			
R3BD1S	-0.06736 0.05536	-0.07536 0.04736	-0.06536 0.05736	-0.06936 0.05336		
R3BM1S	-0.06936 0.05336	-0.07736 0.04536	-0.06736 0.05536	-0.07136 0.05136	-0.06336 0.05936	
R3BU1S	-0.05136 0.07136	-0.05936 0.06336	-0.04936 0.07336	-0.05336 0.06936	-0.04536 0.07736	-0.04336 0.07936

R3CM1S	-0.05936 0.06336	-0.06736 0.05536	-0.05736 0.06536	-0.06136 0.06136	-0.05336 0.06936	-0.05136 0.07136

	R3BU1S
R3CM1S	-0.06936 0.05336

One-way Analysis of Variance

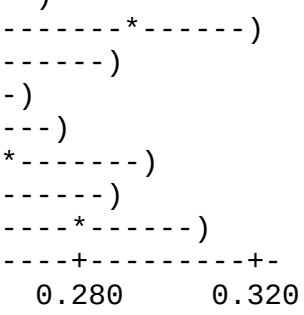
Analysis of Variance for R-4 Weig

Source	DF	SS	MS	F	P
R-4	8	0.02071	0.00259	2.20	0.051
Error	36	0.04232	0.00118		
Total	44	0.06303			

Level	N	Mean	StDev
CONTROL	5	0.21400	0.03847
R4AD1S	5	0.24000	0.03937
R4AM1S	5	0.29000	0.04743
R4AU1S	5	0.25600	0.02074
R4BD1S	5	0.23800	0.02950
R4BM1S	5	0.24400	0.02302
R4BU1S	5	0.26400	0.01817
R4CM1S	5	0.25800	0.03768
R4CM2S	5	0.27800	0.04147

Pooled StDev = 0.03429

Individual 95% CIs For Mean
Based on Pooled StDev



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00841

Critical value = 2.79

Control = level (CONTROL) of R-4

Level	Lower	Center	Upper
R4AD1S	-0.03446	0.02600	0.08646
R4AM1S	0.01554	0.07600	0.13646

```
R4AU1S    -0.01846   0.04200   0.10246     (-----------*-----------)
R4BD1S    -0.03646   0.02400   0.08446  (-----------*-----------)
R4BM1S    -0.03046   0.03000   0.09046   (-----------*-----------)
R4BU1S    -0.01046   0.05000   0.11046      (-----------*-----------)
R4CM1S    -0.01646   0.04400   0.10446     (-----------*-----------)
R4CM2S     0.00354   0.06400   0.12446         (-----------*-----------)
                                       --------+---------+---------+---------
                                            0.000     0.050     0.100
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00222

Critical value = 4.66

Intervals for (column level mean) - (row level mean)

	CONTROL	R4AD1S	R4AM1S	R4AU1S	R4BD1S	R4BM1S
R4AD1S	-0.09745 0.04545					
R4AM1S	-0.14745 -0.00455	-0.12145 0.02145				
R4AU1S	-0.11345 0.02945	-0.08745 0.05545	-0.03745 0.10545			
R4BD1S	-0.09545 0.04745	-0.06945 0.07345	-0.01945 0.12345	-0.05345 0.08945		
R4BM1S	-0.10145 0.04145	-0.07545 0.06745	-0.02545 0.11745	-0.05945 0.08345	-0.07745 0.06545	

R4BU1S	-0.12145	-0.09545	-0.04545	-0.07945	-0.09745	-0.09145
	0.02145	0.04745	0.09745	0.06345	0.04545	0.05145
R4CM1S	-0.11545	-0.08945	-0.03945	-0.07345	-0.09145	-0.08545
	0.02745	0.05345	0.10345	0.06945	0.05145	0.05745
R4CM2S	-0.13545	-0.10945	-0.05945	-0.09345	-0.11145	-0.10545
	0.00745	0.03345	0.08345	0.04945	0.03145	0.03745

	R4BU1S	R4CM1S
R4CM1S	-0.06545	
	0.07745	
R4CM2S	-0.08545	-0.09145
	0.05745	0.05145

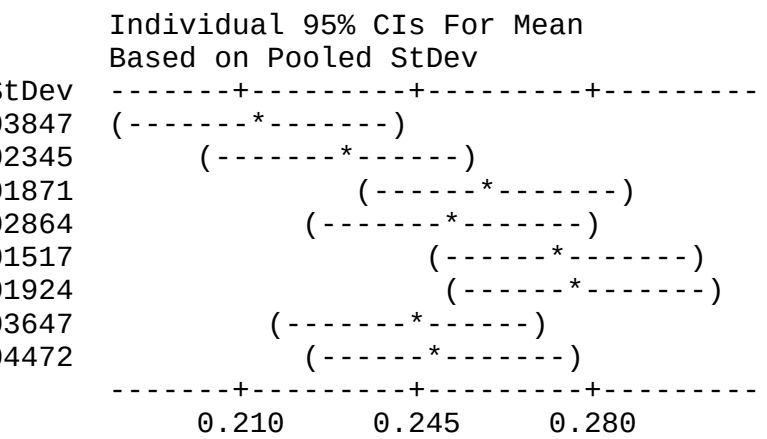
One-way Analysis of Variance

Analysis of Variance for R-5 Weig

Source	DF	SS	MS	F	P
R-5	7	0.015978	0.002283	2.56	0.033
Error	32	0.028520	0.000891		
Total	39	0.044498			

Level	N	Mean	StDev
CONTROL	5	0.21400	0.03847
R5AM1s	5	0.23000	0.02345
R5AN1S	5	0.26000	0.01871
R5AU1s	5	0.25200	0.02864
R5BM1S	5	0.27400	0.01517
R5BN1S	5	0.27800	0.01924
R5BU1S	5	0.24400	0.03647
R5CM1S	5	0.25000	0.04472

Individual 95% CIs For Mean Based on Pooled StDev



Pooled StDev = 0.02985

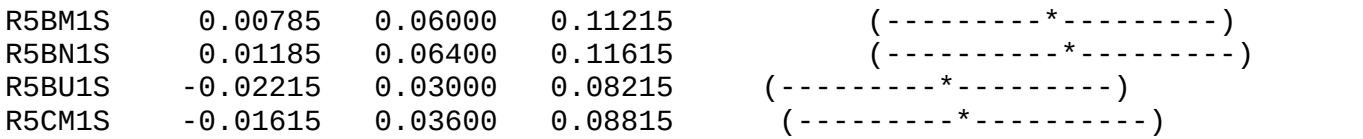
Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00944

Critical value = 2.76

Control = level (CONTROL) of R-5

Level	Lower	Center	Upper
R5AM1s	-0.03615	0.01600	0.06815
R5AN1S	-0.00615	0.04600	0.09815
R5AU1s	-0.01415	0.03800	0.09015



Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00280

Critical value = 4.58

Intervals for (column level mean) - (row level mean)

	CONTROL	R5AM1s	R5AN1S	R5AU1s	R5BM1S	R5BN1S
R5AM1s	-0.07715 0.04515					
R5AN1S	-0.10715 0.01515	-0.09115 0.03115				
R5AU1s	-0.09915 0.02315	-0.08315 0.03915	-0.05315 0.06915			
R5BM1S	-0.12115 0.00115	-0.10515 0.01715	-0.07515 0.04715	-0.08315 0.03915		
R5BN1S	-0.12515 -0.00285	-0.10915 0.01315	-0.07915 0.04315	-0.08715 0.03515	-0.06515 0.05715	
R5BU1S	-0.09115 0.03115	-0.07515 0.04715	-0.04515 0.07715	-0.05315 0.06915	-0.03115 0.09115	-0.02715 0.09515

R5CM1S	-0.09715	-0.08115	-0.05115	-0.05915	-0.03715	-0.03315
	0.02515	0.04115	0.07115	0.06315	0.08515	0.08915

	R5BU1S
R5CM1S	-0.06715
	0.05515

One-way Analysis of Variance

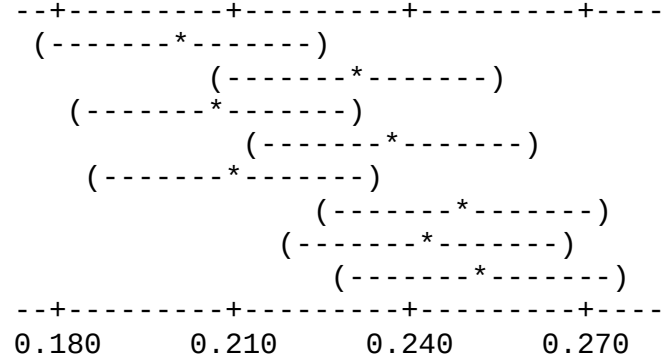
Analysis of Variance for R-6 Weig

Source	DF	SS	MS	F	P
R-6	7	0.014338	0.002048	2.95	0.017
Error	32	0.022240	0.000695		
Total	39	0.036578			

Level	N	Mean	StDev
CONTROL	5	0.20000	0.04062
R6AD1s	5	0.23000	0.00707
R6AM1s	5	0.20600	0.02966
R6AM2s	5	0.23800	0.02387
R6AU1s	5	0.21000	0.01225
R6BM1s	5	0.24800	0.01789
R6BU1s	5	0.24200	0.02864
R6CM1s	5	0.25200	0.03347

Pooled StDev = 0.02636

Individual 95% CIs For Mean
Based on Pooled StDev



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00944

Critical value = 2.76

Control = level (CONTROL) of R-6

Level	Lower	Center	Upper
R6AD1s	-0.01605	0.03000	0.07605
R6AM1s	-0.04005	0.00600	0.05205
R6AM2s	-0.00805	0.03800	0.08405
R6AU1s	-0.03605	0.01000	0.05605

```
R6BM1s     0.00195   0.04800   0.09405            (-----------*-----------)
R6BU1s    -0.00405   0.04200   0.08805          (-----------*----------)
R6CM1s     0.00595   0.05200   0.09805             (-----------*-----------)
                                       -+---------+---------+---------+------
                                     -0.040     0.000     0.040     0.080
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00280

Critical value = 4.58

Intervals for (column level mean) - (row level mean)

	CONTROL	R6AD1s	R6AM1s	R6AM2s	R6AU1s	R6BM1s
R6AD1s	-0.08400 0.02400					
R6AM1s	-0.06000 0.04800	-0.03000 0.07800				
R6AM2s	-0.09200 0.01600	-0.06200 0.04600	-0.08600 0.02200			
R6AU1s	-0.06400 0.04400	-0.03400 0.07400	-0.05800 0.05000	-0.02600 0.08200		
R6BM1s	-0.10200 0.00600	-0.07200 0.03600	-0.09600 0.01200	-0.06400 0.04400	-0.09200 0.01600	
R6BU1s	-0.09600 0.01200	-0.06600 0.04200	-0.09000 0.01800	-0.05800 0.05000	-0.08600 0.02200	-0.04800 0.06000

```
 R6CM1s     -0.10600    -0.07600    -0.10000    -0.06800    -0.09600    -0.05800
             0.00200     0.03200     0.00800     0.04000     0.01200     0.05000


           R6BU1s

 R6CM1s     -0.06400
             0.04400
```

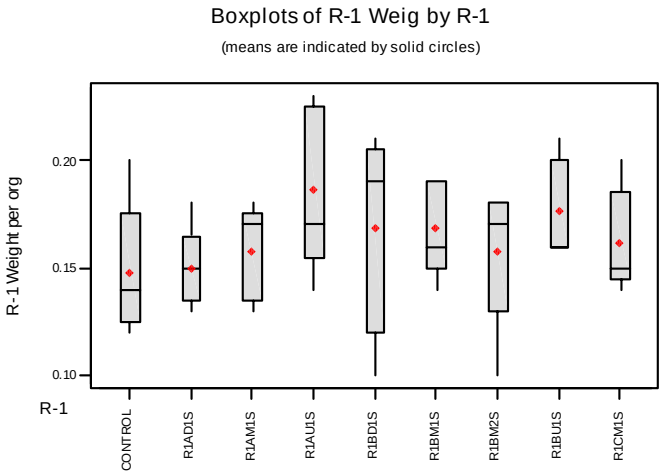
One-way Analysis of Variance

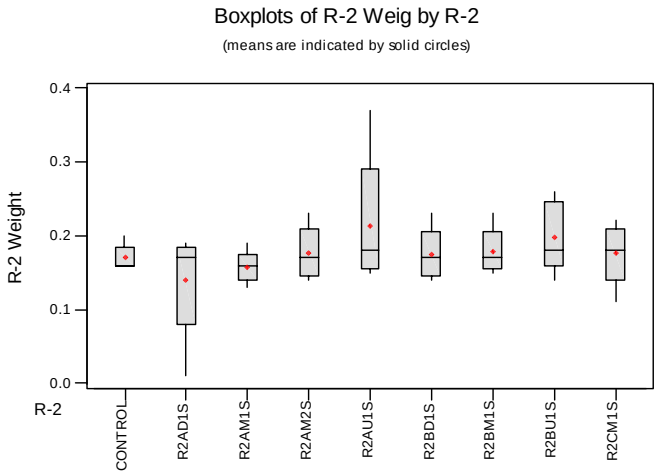
```
Analysis of Variance for R-6 Weig
Source     DF        SS        MS        F        P
R-6         7  0.014338  0.002048     2.95    0.017
Error      32  0.022240  0.000695
Total      39  0.036578

                                 Individual 95% CIs For Mean
                                 Based on Pooled StDev
Level       N      Mean     StDev  --+---------+---------+---------+----
CONTROL     5   0.20000   0.04062   (-------*-------)
R6AD1s      5   0.23000   0.00707             (-------*-------)
R6AM1s      5   0.20600   0.02966     (-------*-------)
R6AM2s      5   0.23800   0.02387               (-------*-------)
R6AU1s      5   0.21000   0.01225      (-------*-------)
R6BM1s      5   0.24800   0.01789                 (-------*-------)
R6BU1s      5   0.24200   0.02864               (-------*-------)
R6CM1s      5   0.25200   0.03347                  (-------*-------)
                                 --+---------+---------+---------+----
Pooled StDev =  0.02636          0.180     0.210     0.240     0.270

Dunnett's intervals for treatment mean minus control mean

    Family error rate = 0.0500
Individual error rate = 0.00944
```

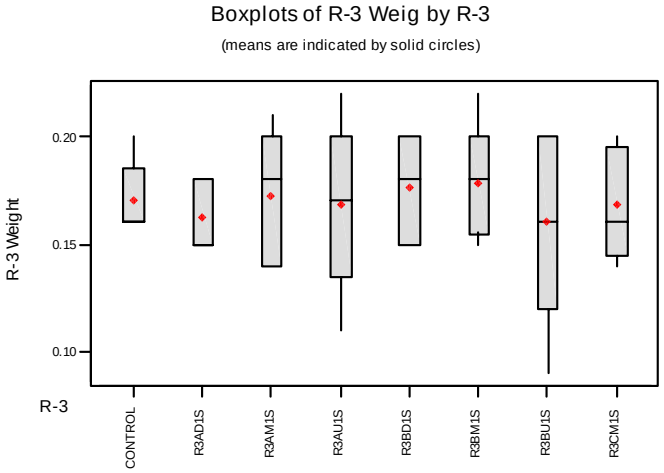
```
Critical value = 2.76

Control = level (CONTROL) of R-6

Level        Lower    Center     Upper -+---------+---------+---------+------
R6AD1s    -0.01605   0.03000   0.07605        (-----------*----------)
R6AM1s    -0.04005   0.00600   0.05205  (-----------*----------)
R6AM2s    -0.00805   0.03800   0.08405          (-----------*----------)
R6AU1s    -0.03605   0.01000   0.05605   (-----------*----------)
R6BM1s     0.00195   0.04800   0.09405            (-----------*-----------)
R6BU1s    -0.00405   0.04200   0.08805           (-----------*----------)
R6CM1s     0.00595   0.05200   0.09805             (-----------*-----------)
                                      -+---------+---------+---------+------
                                    -0.040     0.000     0.040     0.080


Tukey's pairwise comparisons

    Family error rate = 0.0500
Individual error rate = 0.00280

Critical value = 4.58

Intervals for (column level mean) - (row level mean)

           CONTROL     R6AD1s      R6AM1s      R6AM2s      R6AU1s      R6BM1s

 R6AD1s     -0.08400
             0.02400

 R6AM1s     -0.06000    -0.03000
             0.04800     0.07800

 R6AM2s     -0.09200    -0.06200    -0.08600
             0.01600     0.04600     0.02200
```

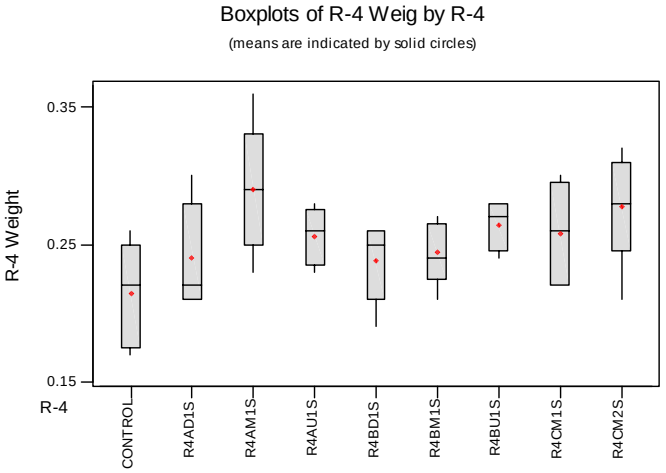
R6AU1s	-0.06400	-0.03400	-0.05800	-0.02600		
	0.04400	0.07400	0.05000	0.08200		
R6BM1s	-0.10200	-0.07200	-0.09600	-0.06400	-0.09200	
	0.00600	0.03600	0.01200	0.04400	0.01600	
R6BU1s	-0.09600	-0.06600	-0.09000	-0.05800	-0.08600	-0.04800
	0.01200	0.04200	0.01800	0.05000	0.02200	0.06000
R6CM1s	-0.10600	-0.07600	-0.10000	-0.06800	-0.09600	-0.05800
	0.00200	0.03200	0.00800	0.04000	0.01200	0.05000

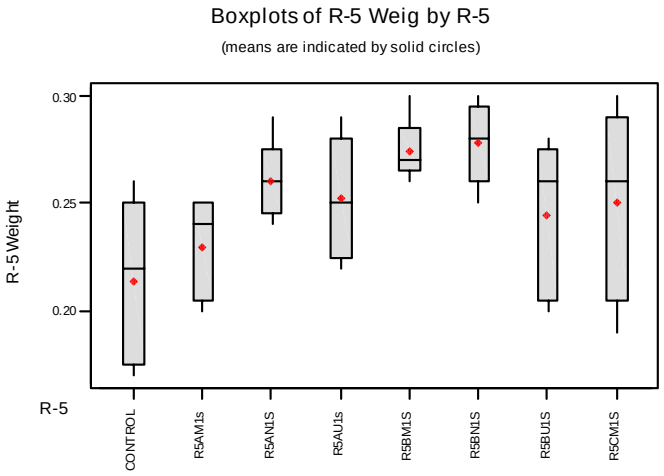
	R6BU1s
R6CM1s	-0.06400
	0.04400

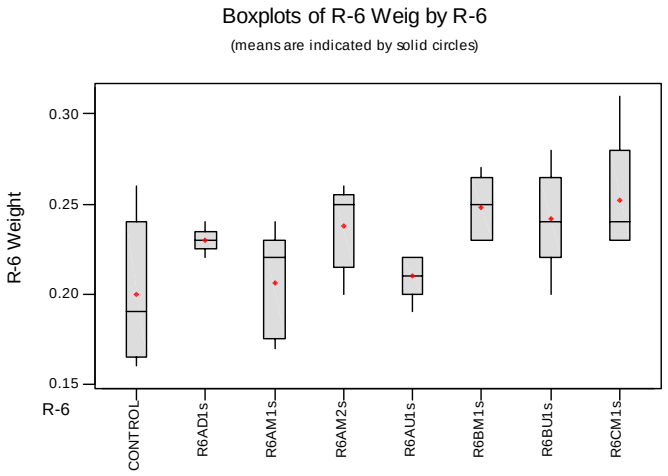

Boxplots of R-1 Weig by R-1
(means are indicated by solid circles)
R-1 Weight per org
0.20
0.15
0.10
R-1
CONTROL
R1AD1S
R1AM1S
R1AU1S
R1BD1S
R1BM1S
R1BM2S
R1BU1S
R1CM1S


Boxplots of R-2 Weig by R-2
(means are indicated by solid circles)
R-2 Weight
0.4
0.3
0.2
0.1
0.0
R-2
CONTROL
R2AD1S
R2AM1S
R2AM2S
R2AU1S
R2BD1S
R2BM1S
R2BU1S
R2CM1S


Boxplots of R-3 Weig by R-3
(means are indicated by solid circles)
R-3 Weight
0.20
0.15
0.10
R-3
CONTROL
R3AD1S
R3AM1S
R3AU1S
R3BD1S
R3BM1S
R3BU1S
R3CM1S


Boxplots of R-4 Weig by R-4
(means are indicated by solid circles)
R-4 Weight
0.35
0.25
0.15
R-4
CONTROL
R4AD1S
R4AM1S
R4AU1S
R4BD1S
R4BM1S
R4BU1S
R4CM1S
R4CM2S


Boxplots of R-5 Weig by R-5
(means are indicated by solid circles)
R-5 Weight
0.30
0.25
0.20
R-5
CONTROL
R5AM1s
R5AN1S
R5AU1s
R5BM1S
R5BN1S
R5BU1S
R5CM1S


Boxplots of R-6 Weig by R-6
(means are indicated by solid circles)
R-6 Weight
0.30
0.25
0.20
0.15
R-6
CONTROL
R6AD1s
R6AM1s
R6AM2s
R6AU1s
R6BM1s
R6BU1s
R6CM1s

Appendix II-F

Surface Water Toxicity Testing Results and Statistical Analysis

AMEC - Sauget

Site R1

***Ceriodaphnia* Summary Results**

Survival

Site	Mean 48-hr % Survival	Mean 7-dy % Survival
Control	100	90
R1BU1W	100	100
R1BM1W	100	100
R1BD1W	100	90
R1AM1W	100	100
R1CM1W	100	100
R1BM2W	100	100
R1AD1W	100	90
R1AU1W	100	100

Reproduction

Replicate	Number of Neonates Produced								
	Control	R1BU1W	R1BM1W	R1BD1W	R1AM1W	R1CM1W	R1BM2W	R1AD1W	R1AU1W
1	26	31	33	40	36	35	42	41	40
2	24	28	32	34	38	37	28	40	27
3	26	33	5	31	41	38	28	34	39
4	33	34	6	32	31	40	39	32	35
5	27	17	33	38	2	37	36	35	39
6	18	42	32	36	33	38	48	39	34
7	32	29	28	34	31	36	19	34	29
8	20	39	36	41	32	39	33	17	38
9	4	30	38	26	37	37	36	32	34
10	24	30	33	7	44	43	37	37	34
Mean	23	31	28	32	33	38	35	34	35

AMEC - Sauget

Site R2

***Ceriodaphnia* Summary Results**

Survival

Site	Mean 48-hr % Survival	Mean 7-dy % Survival
Control	100	100
R2BD1W	100	100
R2AD1W	100	100
R2AM2W	100	100
R2BM1W	100	100
R2CM1W	100	100
R2AU1W	100	100
R2BU1W	100	100
R2AM1W	100	100

Reproduction

	Number of Neonates Produced								
Replicate	Control	R2BD1W	R2AD1W	R2AM2W	R2BM1W	R2CM1W	R2AU1W	R2BU1W	R2AM1W
1	35	41	43	37	34	37	30	38	40
2	21	39	34	34	37	39	37	37	34
3	17	36	37	42	33	38	34	39	38
4	35	34	16	46	41	37	40	34	11
5	35	37	44	37	38	38	38	36	41
6	33	42	41	39	21	31	19	38	40
7	16	43	17	45	18	35	36	30	39
8	30	41	34	30	39	40	35	38	35
9	33	38	33	42	43	40	33	42	38
10	33	44	37	40	41	36	35	37	32
Mean	29	40	34	39	35	37	34	37	35

AMEC - Sauget

Site R3

Ceriodaphnia Summary Results

Survival

Site	Mean 48-hr % Survival	Mean 7-dy % Survival
Control	100	100
R3BU1W	100	100
R3AD1W	100	100
R3AM1W	100	100
R3CM1W	100	100
R3BM1W	100	100
R3BD1W	100	100
R3AU1W	0	0

Reproduction

Number of Neonates Produced								
Replicate	Control	R3BU1W	R3AD1W	R3AM1W	R3CM1W	R3BM1W	R3BD1W	R3AU1W
1	16	5	14	20	31	21	30	0
2	17	3	8	23	39	16	19	0
3	36	0	7	16	27	16	34	0
4	39	1	17	15	36	11	41	0
5	33	4	4	21	36	15	41	0
6	36	0	3	4	40	17	37	0
7	35	16	8	24	34	19	20	0
8	34	4	5	14	39	12	36	0
9	32	14	13	16	41	25	27	0
10	34	14	14	20	37	18	32	0
Mean	31.2	6.1	9.3	17.3	36	17	31.7	0

AMEC - Sauget

Site R4

Ceriodaphnia Summary Results

Survival

Site	Mean 48-hr % Survival	Mean 7-dy % Survival
Control	100	100
R4BD1W	100	100
R4AM1W[a]	100	67
R4AD1W	100	70
R4CM2W	100	100
R4BM1W	100	100
R4AU1W	100	90
R4CM1W	100	100
R4BU1W	100	80

a - one animal lost during test period ; not factored into survival

Reproduction

	Number of Neonates Produced								
Replicate	Control	R4BD1W	R4AM1W	R4AD1W	R4CM2W	R4BM1W	R4AU1W	R4CM1W	R4BU1W
1	29	34	37	0	11	35	26	5	26
2	35	33	22	27	6	39	18	29	28
3	20	23	0	6	34	14	20	3	21
4	19	25	na	0	30	4	5	30	18
5	30	22	5	0	8	26	22	6	4
6	8	14	0	20	15	6	0	38	23
7	24	8	11	20	33	8	10	30	18
8	29	27	0	0	3	32	25	6	31
9	25	34	22	19	8	29	10	31	0
10	26	36	4	0	32	23	31	12	27
Mean	25	26	11	9	18	22	17	19	20

na - animal lost during test period

AMEC -Sauget

Site R5

Ceriodaphnia Summary Results

Survival

Site	Mean 48-hr % Survival	Mean 7-dy % Survival
Control	100	100
R5AU1W	100	100
R5AM1W	100	100
R5BM1W	100	80
R5AD1W	100	70
R5BD1W	100	80
R5CM1W	100	90
R5BU1W	100	100
R5BN1W	100	100
R5AN1W	100	100

Reproduction

	Number of Neonates Produced									
Replicate	Control	R5AU1W	R5AM1W	R5BM1W	R5AD1W	R5BD1W	R5CM1W	R5BU1W	R5BN1W	R5AN1W
1	30	37	14	6	21	30	17	3	33	36
2	27	34	16	40	20	27	38	33	38	44
3	6	35	5	0	17	6	5	36	19	45
4	6	36	6	14	0	6	34	33	34	34
5	7	39	6	6	7	7	6	39	39	36
6	22	33	17	6	7	22	5	33	36	32
7	16	37	5	8	4	16	8	32	39	37
8	0	0	6	22	6	0	15	6	38	37
9	37	39	5	30	0	37	0	5	35	41
10	19	41	5	6	8	19	22	5	41	42
Mean	17	33	9	14	9	17	15	23	35	38

AMEC - Sauget
Site R6
Ceriodaphnia Summary Results

Survival

Site	Mean 48-hr % Survival	Mean 7-dy % Survival
Control	100	90
R6AU1W	100	80
R6AD1W	100	90
R6BU1W	100	90
R6BM1W	100	80
R6CM1W	100	100
R6AM2W	100	100
R6AM1W	100	70

Reproduction

	Number of Neonates Produced							
Replicate	Control	R6AU1W	R6AD1W	R6BU1W	R6BM1W	R6CM1W	R6AM2W	R6AM1W
1	30	36	18	7	0	19	0	19
2	25	44	33	40	26	23	29	38
3	18	6	7	24	5	30	35	0
4	35	6	36	0	6	41	37	0
5	34	29	21	37	7	37	37	6
6	30	10	0	0	0	30	28	47
7	33	7	29	6	0	37	33	36
8	0	4	14	6	0	33	35	13
9	23	39	5	38	0	39	40	41
10	33	0	32	36	39	0	34	7
Mean	26	18	20	19	8	29	31	21

********CERIODAPHNIA SURVIVAL********

One-way Analysis of Variance

Analysis of Variance for 2-day Control Samples

Source	DF	SS	MS	F	P
Sample C	5	0.0000000	0.0000000	*	*
Error	103	0.0000000	0.0000000		
Total	108	0.0000000			

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
Control1	19	1.00000	0.00000	*
Control2	10	1.00000	0.00000	*
Control3	20	1.00000	0.00000	*
Control4	20	1.00000	0.00000	*
Control5	20	1.00000	0.00000	*
Control6	20	1.00000	0.00000	*

Pooled StDev = 0.00000 1.00010 1.00020 1.00030

* NOTE * Cannot perform the Normal Score plot with MSE=0

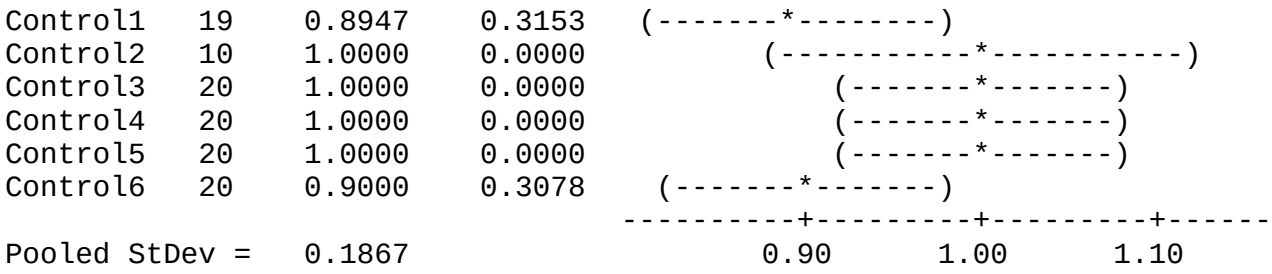
* NOTE * All values in column are identical.

One-way Analysis of Variance

Analysis of Variance for 7-day Control Samples

Source	DF	SS	MS	F	P
Sample C	5	0.2637	0.0527	1.51	0.192
Error	103	3.5895	0.0348		
Total	108	3.8532			

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev


Control1 19 0.8947 0.3153
Control2 10 1.0000 0.0000
Control3 20 1.0000 0.0000
Control4 20 1.0000 0.0000
Control5 20 1.0000 0.0000
Control6 20 0.9000 0.3078
Pooled StDev = 0.1867
0.90
1.00
1.10

One-way Analysis of Variance

Analysis of Variance for Mean 48-Survival

Source	DF	SS	MS	F	P
ID all c	47	19.61052	0.41725	1.9E+16	0.000
Error	979	0.00000	0.00000		
Total	1026	19.61052			

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
Control	109	1.00000	0.00000	*
R1AD1W	20	1.00000	0.00000	*
R1AM1W	20	1.00000	0.00000	*
R1AU1W	20	1.00000	0.00000	*
R1BD1W	20	1.00000	0.00000	*
R1BM1W	20	1.00000	0.00000	*
R1BM2W	20	1.00000	0.00000	*
R1BU1W	20	1.00000	0.00000	*
R1CM1W	80	1.00000	0.00000	*
R2AD1W	10	1.00000	0.00000	*
R2AM1W	10	1.00000	0.00000	*
R2AM2W	10	1.00000	0.00000	*
R2AU1W	10	1.00000	0.00000	*
R2BD1W	10	1.00000	0.00000	*
R2BM1W	10	1.00000	0.00000	*
R2BU1W	10	1.00000	0.00000	*
R2CM1W	10	1.00000	0.00000	*
R3AD1W	20	1.00000	0.00000	*
R3AM1W	20	1.00000	0.00000	*
R3AU1W	20	0.00000	0.00000	*
R3BD1W	20	1.00000	0.00000	*
R3BM1W	20	1.00000	0.00000	*
R3BU1W	20	1.00000	0.00000	*
R3CM1W	20	1.00000	0.00000	*
R4AD1W	20	1.00000	0.00000	*

```
R4AM1W     18   1.00000   0.00000                                        *
R4AU1W     20   1.00000   0.00000                                        *
R4BD1W     20   1.00000   0.00000                                        *
R4BM1W     20   1.00000   0.00000                                        *
R4BU1W     20   1.00000   0.00000                                        *
R4CM1W     20   1.00000   0.00000                                        *
R4CM2W     20   1.00000   0.00000                                        *
R5AD1W     20   1.00000   0.00000                                        *
R5AM1W     20   1.00000   0.00000                                        *
R5AN1W     20   1.00000   0.00000                                        *
R5AU1W     20   1.00000   0.00000                                        *
R5BD1W     20   1.00000   0.00000                                        *
R5BM1W     20   1.00000   0.00000                                        *
R5BN1W     20   1.00000   0.00000                                        *
R5BU1W     20   1.00000   0.00000                                        *
R5CM1W     20   1.00000   0.00000                                        *
R6AD1W     20   1.00000   0.00000                                        *
R6AM1W     20   1.00000   0.00000                                        *
R6AM2W     20   1.00000   0.00000                                        *
R6AU1W     20   1.00000   0.00000                                        *
R6BM1W     20   1.00000   0.00000                                        *
R6BU1W     20   1.00000   0.00000                                        *
R6CM1W     20   1.00000   0.00000                                        *
                              -+---------+---------+---------+-----
Pooled StDev =  0.00000           0.00      0.30      0.60      0.90

Dunnett's intervals for treatment mean minus control mean

    Family error rate = 0.0500
Individual error rate = 0.00117

Critical value = 3.26

Control = level (Control) of ID all c

Level        Lower    Center     Upper ----+---------+---------+---------+---
```

R1AD1W	-0.00000	0.00000	0.00000		*
R1AM1W	-0.00000	0.00000	0.00000		*
R1AU1W	-0.00000	0.00000	0.00000		*
R1BD1W	-0.00000	0.00000	0.00000		*
R1BM1W	-0.00000	0.00000	0.00000		*
R1BM2W	-0.00000	0.00000	0.00000		*
R1BU1W	-0.00000	0.00000	0.00000		*
R1CM1W	-0.00000	0.00000	0.00000		*
R2AD1W	-0.00000	0.00000	0.00000		*
R2AM1W	-0.00000	0.00000	0.00000		*
R2AM2W	-0.00000	0.00000	0.00000		*
R2AU1W	-0.00000	0.00000	0.00000		*
R2BD1W	-0.00000	0.00000	0.00000		*
R2BM1W	-0.00000	0.00000	0.00000		*
R2BU1W	-0.00000	0.00000	0.00000		*
R2CM1W	-0.00000	0.00000	0.00000		*
R3AD1W	-0.00000	0.00000	0.00000		*
R3AM1W	-0.00000	0.00000	0.00000		*
R3AU1W	-1.00000	-1.00000	-1.00000	*	
R3BD1W	-0.00000	0.00000	0.00000		*
R3BM1W	-0.00000	0.00000	0.00000		*
R3BU1W	-0.00000	0.00000	0.00000		*
R3CM1W	-0.00000	0.00000	0.00000		*
R4AD1W	-0.00000	0.00000	0.00000		*
R4AM1W	-0.00000	0.00000	0.00000		*
R4AU1W	-0.00000	0.00000	0.00000		*
R4BD1W	-0.00000	0.00000	0.00000		*
R4BM1W	-0.00000	0.00000	0.00000		*
R4BU1W	-0.00000	0.00000	0.00000		*
R4CM1W	-0.00000	0.00000	0.00000		*
R4CM2W	-0.00000	0.00000	0.00000		*
R5AD1W	-0.00000	0.00000	0.00000		*
R5AM1W	-0.00000	0.00000	0.00000		*
R5AN1W	-0.00000	0.00000	0.00000		*
R5AU1W	-0.00000	0.00000	0.00000		*
R5BD1W	-0.00000	0.00000	0.00000		*

```
R5BM1W    -0.00000   0.00000   0.00000                                  *
R5BN1W    -0.00000   0.00000   0.00000                                  *
R5BU1W    -0.00000   0.00000   0.00000                                  *
R5CM1W    -0.00000   0.00000   0.00000                                  *
R6AD1W    -0.00000   0.00000   0.00000                                  *
R6AM1W    -0.00000   0.00000   0.00000                                  *
R6AM2W    -0.00000   0.00000   0.00000                                  *
R6AU1W    -0.00000   0.00000   0.00000                                  *
R6BM1W    -0.00000   0.00000   0.00000                                  *
R6BU1W    -0.00000   0.00000   0.00000                                  *
R6CM1W    -0.00000   0.00000   0.00000                                  *
                                      ----+---------+---------+---------+---
                                       -0.90     -0.60     -0.30      0.00


Tukey's pairwise comparisons

    Family error rate = 0.0500
Individual error rate = 0.0000759

Critical value = 5.62

Intervals for (column level mean) - (row level mean)

           Control     R1AD1W      R1AM1W      R1AU1W      R1BD1W      R1BM1W

 R1AD1W     -0.00000
             0.00000

 R1AM1W     -0.00000    -0.00000
             0.00000     0.00000

 R1AU1W     -0.00000    -0.00000    -0.00000
             0.00000     0.00000     0.00000

 R1BD1W     -0.00000    -0.00000    -0.00000    -0.00000
```

	0.00000	0.00000	0.00000	0.00000		
R1BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	
	0.00000	0.00000	0.00000	0.00000	0.00000	
R1BM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R1BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R1CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R2AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R2AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R2AM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R2AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R2BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R2BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R2BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R2CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3AU1W	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
R3BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4CM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AN1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BN1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

	R1BM2W	R1BU1W	R1CM1W	R2AD1W	R2AM1W	R2AM2W
R1BU1W	-0.00000					
	0.00000					
R1CM1W	-0.00000	-0.00000				
	0.00000	0.00000				
R2AD1W	-0.00000	-0.00000	-0.00000			
	0.00000	0.00000	0.00000			
R2AM1W	-0.00000	-0.00000	-0.00000	-0.00000		

	0.00000	0.00000	0.00000	0.00000		
R2AM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	
	0.00000	0.00000	0.00000	0.00000	0.00000	
R2AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R2BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R2BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R2BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R2CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3AU1W	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
R3BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4CM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AN1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BN1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

	R2AU1W	R2BD1W	R2BM1W	R2BU1W	R2CM1W	R3AD1W
R2BD1W	-0.00000					
	0.00000					
R2BM1W	-0.00000	-0.00000				
	0.00000	0.00000				
R2BU1W	-0.00000	-0.00000	-0.00000			
	0.00000	0.00000	0.00000			
R2CM1W	-0.00000	-0.00000	-0.00000	-0.00000		
	0.00000	0.00000	0.00000	0.00000		
R3AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	
	0.00000	0.00000	0.00000	0.00000	0.00000	
R3AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3AU1W	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
R3BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R3CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4CM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AN1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BN1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

	R3AM1W	R3AU1W	R3BD1W	R3BM1W	R3BU1W	R3CM1W
R3AU1W	1.00000					
	1.00000					
R3BD1W	-0.00000	-1.00000				
	0.00000	-1.00000				
R3BM1W	-0.00000	-1.00000	-0.00000			
	0.00000	-1.00000	0.00000			
R3BU1W	-0.00000	-1.00000	-0.00000	-0.00000		
	0.00000	-1.00000	0.00000	0.00000		
R3CM1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	
	0.00000	-1.00000	0.00000	0.00000	0.00000	
R4AD1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R4AM1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R4AU1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R4BD1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R4BM1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R4BU1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R4CM1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R4CM2W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R5AD1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R5AM1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R5AN1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R5AU1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R5BD1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R5BM1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R5BN1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R5BU1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R5CM1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R6AD1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R6AM1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R6AM2W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R6AU1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R6BM1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R6BU1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000
R6CM1W	-0.00000	-1.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	-1.00000	0.00000	0.00000	0.00000	0.00000

	R4AD1W	R4AM1W	R4AU1W	R4BD1W	R4BM1W	R4BU1W
R4AM1W	-0.00000					
	0.00000					
R4AU1W	-0.00000	-0.00000				
	0.00000	0.00000				
R4BD1W	-0.00000	-0.00000	-0.00000			
	0.00000	0.00000	0.00000			
R4BM1W	-0.00000	-0.00000	-0.00000	-0.00000		

	0.00000	0.00000	0.00000	0.00000		
R4BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	
	0.00000	0.00000	0.00000	0.00000	0.00000	
R4CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R4CM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AN1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BN1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

	R4CM1W	R4CM2W	R5AD1W	R5AM1W	R5AN1W	R5AU1W
R4CM2W	-0.00000					
	0.00000					
R5AD1W	-0.00000	-0.00000				
	0.00000	0.00000				
R5AM1W	-0.00000	-0.00000	-0.00000			
	0.00000	0.00000	0.00000			
R5AN1W	-0.00000	-0.00000	-0.00000	-0.00000		

	0.00000	0.00000	0.00000	0.00000		
R5AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	
	0.00000	0.00000	0.00000	0.00000	0.00000	
R5BD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BN1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R5CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

	R5BD1W	R5BM1W	R5BN1W	R5BU1W	R5CM1W	R6AD1W
R5BM1W	-0.00000					
	0.00000					
R5BN1W	-0.00000	-0.00000				
	0.00000	0.00000				
R5BU1W	-0.00000	-0.00000	-0.00000			
	0.00000	0.00000	0.00000			
R5CM1W	-0.00000	-0.00000	-0.00000	-0.00000		
	0.00000	0.00000	0.00000	0.00000		
R6AD1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	
	0.00000	0.00000	0.00000	0.00000	0.00000	
R6AM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AM2W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6AU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6BM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6BU1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000

	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
R6CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

	R6AM1W	R6AM2W	R6AU1W	R6BM1W	R6BU1W
R6AM2W	-0.00000				
	0.00000				
R6AU1W	-0.00000	-0.00000			
	0.00000	0.00000			
R6BM1W	-0.00000	-0.00000	-0.00000		
	0.00000	0.00000	0.00000		
R6BU1W	-0.00000	-0.00000	-0.00000	-0.00000	
	0.00000	0.00000	0.00000	0.00000	
R6CM1W	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	0.00000	0.00000	0.00000	0.00000	0.00000

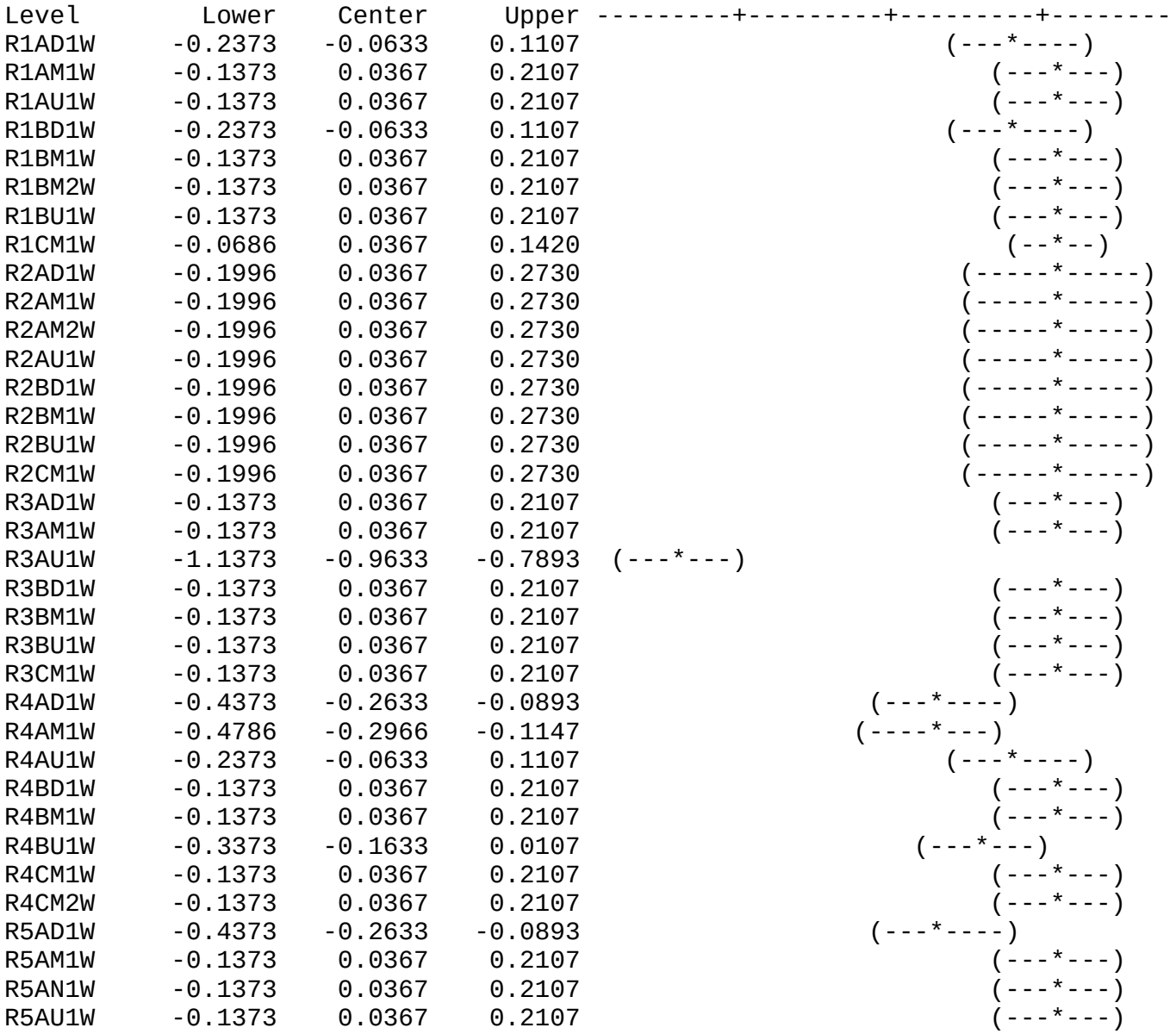
One-way Analysis of Variance

Analysis of Variance for Mean 7-day Survival

Source	DF	SS	MS	F	P
ID all c	47	26.5150	0.5641	11.69	0.000
Error	979	47.2532	0.0483		
Total	1026	73.7683			

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
Control	109	0.9633	0.1889	(-*)
R1AD1W	20	0.9000	0.3078	(--*-)
R1AM1W	20	1.0000	0.0000	(--*-)
R1AU1W	20	1.0000	0.0000	(--*-)
R1BD1W	20	0.9000	0.3078	(--*-)
R1BM1W	20	1.0000	0.0000	(--*-)
R1BM2W	20	1.0000	0.0000	(--*-)
R1BU1W	20	1.0000	0.0000	(--*-)
R1CM1W	80	1.0000	0.0000	(-*)
R2AD1W	10	1.0000	0.0000	(---*--)
R2AM1W	10	1.0000	0.0000	(---*--)
R2AM2W	10	1.0000	0.0000	(---*--)
R2AU1W	10	1.0000	0.0000	(---*--)
R2BD1W	10	1.0000	0.0000	(---*--)
R2BM1W	10	1.0000	0.0000	(---*--)
R2BU1W	10	1.0000	0.0000	(---*--)
R2CM1W	10	1.0000	0.0000	(---*--)
R3AD1W	20	1.0000	0.0000	(--*-)
R3AM1W	20	1.0000	0.0000	(--*-)
R3AU1W	20	0.0000	0.0000	(--*--)
R3BD1W	20	1.0000	0.0000	(--*-)
R3BM1W	20	1.0000	0.0000	(--*-)
R3BU1W	20	1.0000	0.0000	(--*-)
R3CM1W	20	1.0000	0.0000	(--*-)

```
R4AD1W     20    0.7000    0.4702                      (--*--)
R4AM1W     18    0.6667    0.4851                    (--*--)
R4AU1W     20    0.9000    0.3078                          (--*-)
R4BD1W     20    1.0000    0.0000                             (--*-)
R4BM1W     20    1.0000    0.0000                             (--*-)
R4BU1W     20    0.8000    0.4104                       (--*--)
R4CM1W     20    1.0000    0.0000                             (--*-)
R4CM2W     20    1.0000    0.0000                             (--*-)
R5AD1W     20    0.7000    0.4702                      (--*--)
R5AM1W     20    1.0000    0.0000                             (--*-)
R5AN1W     20    1.0000    0.0000                             (--*-)
R5AU1W     20    1.0000    0.0000                             (--*-)
R5BD1W     20    0.8000    0.4104                       (--*--)
R5BM1W     20    0.8000    0.4104                       (--*--)
R5BN1W     20    1.0000    0.0000                             (--*-)
R5BU1W     20    1.0000    0.0000                             (--*-)
R5CM1W     20    0.9000    0.3078                          (--*-)
R6AD1W     20    0.9000    0.3078                          (--*-)
R6AM1W     20    0.7000    0.4702                      (--*--)
R6AM2W     20    1.0000    0.0000                             (--*-)
R6AU1W     20    0.8000    0.4104                       (--*--)
R6BM1W     20    0.8000    0.4104                       (--*--)
R6BU1W     20    0.9000    0.3078                          (--*-)
R6CM1W     20    1.0000    0.0000                             (--*-)
                                   ---+---------+---------+---------+---
Pooled StDev =   0.2197             0.00      0.35      0.70      1.05

Dunnett's intervals for treatment mean minus control mean

    Family error rate = 0.0500
Individual error rate = 0.00117

Critical value = 3.26

Control = level (Control) of ID all c
```


Level Lower Center Upper ---------+---------+---------+--------
R1AD1W -0.2373 -0.0633 0.1107 (---*----)
R1AM1W -0.1373 0.0367 0.2107 (---*---)
R1AU1W -0.1373 0.0367 0.2107 (---*---)
R1BD1W -0.2373 -0.0633 0.1107 (---*----)
R1BM1W -0.1373 0.0367 0.2107 (---*---)
R1BM2W -0.1373 0.0367 0.2107 (---*---)
R1BU1W -0.1373 0.0367 0.2107 (---*---)
R1CM1W -0.0686 0.0367 0.1420 (--*--)
R2AD1W -0.1996 0.0367 0.2730 (-----*-----)
R2AM1W -0.1996 0.0367 0.2730 (-----*-----)
R2AM2W -0.1996 0.0367 0.2730 (-----*-----)
R2AU1W -0.1996 0.0367 0.2730 (-----*-----)
R2BD1W -0.1996 0.0367 0.2730 (-----*-----)
R2BM1W -0.1996 0.0367 0.2730 (-----*-----)
R2BU1W -0.1996 0.0367 0.2730 (-----*-----)
R2CM1W -0.1996 0.0367 0.2730 (-----*-----)
R3AD1W -0.1373 0.0367 0.2107 (---*---)
R3AM1W -0.1373 0.0367 0.2107 (---*---)
R3AU1W -1.1373 -0.9633 -0.7893 (---*---)
R3BD1W -0.1373 0.0367 0.2107 (---*---)
R3BM1W -0.1373 0.0367 0.2107 (---*---)
R3BU1W -0.1373 0.0367 0.2107 (---*---)
R3CM1W -0.1373 0.0367 0.2107 (---*---)
R4AD1W -0.4373 -0.2633 -0.0893 (---*----)
R4AM1W -0.4786 -0.2966 -0.1147 (----*---)
R4AU1W -0.2373 -0.0633 0.1107 (---*----)
R4BD1W -0.1373 0.0367 0.2107 (---*---)
R4BM1W -0.1373 0.0367 0.2107 (---*---)
R4BU1W -0.3373 -0.1633 0.0107 (---*---)
R4CM1W -0.1373 0.0367 0.2107 (---*---)
R4CM2W -0.1373 0.0367 0.2107 (---*---)
R5AD1W -0.4373 -0.2633 -0.0893 (---*----)
R5AM1W -0.1373 0.0367 0.2107 (---*---)
R5AN1W -0.1373 0.0367 0.2107 (---*---)
R5AU1W -0.1373 0.0367 0.2107 (---*---)

```
R5BD1W     -0.3373   -0.1633    0.0107                      (---*---)
R5BM1W     -0.3373   -0.1633    0.0107                      (---*---)
R5BN1W     -0.1373    0.0367    0.2107                           (---*---)
R5BU1W     -0.1373    0.0367    0.2107                           (---*---)
R5CM1W     -0.2373   -0.0633    0.1107                        (---*----)
R6AD1W     -0.2373   -0.0633    0.1107                        (---*----)
R6AM1W     -0.4373   -0.2633   -0.0893                    (---*----)
R6AM2W     -0.1373    0.0367    0.2107                           (---*---)
R6AU1W     -0.3373   -0.1633    0.0107                      (---*---)
R6BM1W     -0.3373   -0.1633    0.0107                      (---*---)
R6BU1W     -0.2373   -0.0633    0.1107                        (---*----)
R6CM1W     -0.1373    0.0367    0.2107                           (---*---)
                                      ---------+---------+---------+--------
                                           -0.80     -0.40     -0.00


Tukey's pairwise comparisons

    Family error rate = 0.0500
Individual error rate = 0.0000759

Critical value = 5.62

Intervals for (column level mean) - (row level mean)

           Control     R1AD1W      R1AM1W      R1AU1W      R1BD1W      R1BM1W

 R1AD1W     -0.1491
             0.2757

 R1AM1W     -0.2491     -0.3761
             0.1757      0.1761

 R1AU1W     -0.2491     -0.3761     -0.2761
             0.1757      0.1761      0.2761
```

R1BD1W	-0.1491	-0.2761	-0.1761	-0.1761		
	0.2757	0.2761	0.3761	0.3761		
R1BM1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	
	0.1757	0.1761	0.2761	0.2761	0.1761	
R1BM2W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R1BU1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R1CM1W	-0.1652	-0.3183	-0.2183	-0.2183	-0.3183	-0.2183
	0.0918	0.1183	0.2183	0.2183	0.1183	0.2183
R2AD1W	-0.3252	-0.4381	-0.3381	-0.3381	-0.4381	-0.3381
	0.2518	0.2381	0.3381	0.3381	0.2381	0.3381
R2AM1W	-0.3252	-0.4381	-0.3381	-0.3381	-0.4381	-0.3381
	0.2518	0.2381	0.3381	0.3381	0.2381	0.3381
R2AM2W	-0.3252	-0.4381	-0.3381	-0.3381	-0.4381	-0.3381
	0.2518	0.2381	0.3381	0.3381	0.2381	0.3381
R2AU1W	-0.3252	-0.4381	-0.3381	-0.3381	-0.4381	-0.3381
	0.2518	0.2381	0.3381	0.3381	0.2381	0.3381
R2BD1W	-0.3252	-0.4381	-0.3381	-0.3381	-0.4381	-0.3381
	0.2518	0.2381	0.3381	0.3381	0.2381	0.3381
R2BM1W	-0.3252	-0.4381	-0.3381	-0.3381	-0.4381	-0.3381
	0.2518	0.2381	0.3381	0.3381	0.2381	0.3381
R2BU1W	-0.3252	-0.4381	-0.3381	-0.3381	-0.4381	-0.3381
	0.2518	0.2381	0.3381	0.3381	0.2381	0.3381

R2CM1W	-0.3252	-0.4381	-0.3381	-0.3381	-0.4381	-0.3381
	0.2518	0.2381	0.3381	0.3381	0.2381	0.3381
R3AD1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R3AM1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R3AU1W	0.7509	0.6239	0.7239	0.7239	0.6239	0.7239
	1.1757	1.1761	1.2761	1.2761	1.1761	1.2761
R3BD1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R3BM1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R3BU1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R3CM1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R4AD1W	0.0509	-0.0761	0.0239	0.0239	-0.0761	0.0239
	0.4757	0.4761	0.5761	0.5761	0.4761	0.5761
R4AM1W	0.0745	-0.0503	0.0497	0.0497	-0.0503	0.0497
	0.5188	0.5170	0.6170	0.6170	0.5170	0.6170
R4AU1W	-0.1491	-0.2761	-0.1761	-0.1761	-0.2761	-0.1761
	0.2757	0.2761	0.3761	0.3761	0.2761	0.3761
R4BD1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761

R4BM1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R4BU1W	-0.0491	-0.1761	-0.0761	-0.0761	-0.1761	-0.0761
	0.3757	0.3761	0.4761	0.4761	0.3761	0.4761
R4CM1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R4CM2W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R5AD1W	0.0509	-0.0761	0.0239	0.0239	-0.0761	0.0239
	0.4757	0.4761	0.5761	0.5761	0.4761	0.5761
R5AM1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R5AN1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R5AU1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R5BD1W	-0.0491	-0.1761	-0.0761	-0.0761	-0.1761	-0.0761
	0.3757	0.3761	0.4761	0.4761	0.3761	0.4761
R5BM1W	-0.0491	-0.1761	-0.0761	-0.0761	-0.1761	-0.0761
	0.3757	0.3761	0.4761	0.4761	0.3761	0.4761
R5BN1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R5BU1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761

R5CM1W	-0.1491	-0.2761	-0.1761	-0.1761	-0.2761	-0.1761
	0.2757	0.2761	0.3761	0.3761	0.2761	0.3761
R6AD1W	-0.1491	-0.2761	-0.1761	-0.1761	-0.2761	-0.1761
	0.2757	0.2761	0.3761	0.3761	0.2761	0.3761
R6AM1W	0.0509	-0.0761	0.0239	0.0239	-0.0761	0.0239
	0.4757	0.4761	0.5761	0.5761	0.4761	0.5761
R6AM2W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761
R6AU1W	-0.0491	-0.1761	-0.0761	-0.0761	-0.1761	-0.0761
	0.3757	0.3761	0.4761	0.4761	0.3761	0.4761
R6BM1W	-0.0491	-0.1761	-0.0761	-0.0761	-0.1761	-0.0761
	0.3757	0.3761	0.4761	0.4761	0.3761	0.4761
R6BU1W	-0.1491	-0.2761	-0.1761	-0.1761	-0.2761	-0.1761
	0.2757	0.2761	0.3761	0.3761	0.2761	0.3761
R6CM1W	-0.2491	-0.3761	-0.2761	-0.2761	-0.3761	-0.2761
	0.1757	0.1761	0.2761	0.2761	0.1761	0.2761

	R1BM2W	R1BU1W	R1CM1W	R2AD1W	R2AM1W	R2AM2W
R1BU1W	-0.2761					
	0.2761					
R1CM1W	-0.2183	-0.2183				
	0.2183	0.2183				
R2AD1W	-0.3381	-0.3381	-0.2928			
	0.3381	0.3381	0.2928			

R2AM1W	-0.3381	-0.3381	-0.2928	-0.3904		
	0.3381	0.3381	0.2928	0.3904		
R2AM2W	-0.3381	-0.3381	-0.2928	-0.3904	-0.3904	
	0.3381	0.3381	0.2928	0.3904	0.3904	
R2AU1W	-0.3381	-0.3381	-0.2928	-0.3904	-0.3904	-0.3904
	0.3381	0.3381	0.2928	0.3904	0.3904	0.3904
R2BD1W	-0.3381	-0.3381	-0.2928	-0.3904	-0.3904	-0.3904
	0.3381	0.3381	0.2928	0.3904	0.3904	0.3904
R2BM1W	-0.3381	-0.3381	-0.2928	-0.3904	-0.3904	-0.3904
	0.3381	0.3381	0.2928	0.3904	0.3904	0.3904
R2BU1W	-0.3381	-0.3381	-0.2928	-0.3904	-0.3904	-0.3904
	0.3381	0.3381	0.2928	0.3904	0.3904	0.3904
R2CM1W	-0.3381	-0.3381	-0.2928	-0.3904	-0.3904	-0.3904
	0.3381	0.3381	0.2928	0.3904	0.3904	0.3904
R3AD1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R3AM1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R3AU1W	0.7239	0.7239	0.7817	0.6619	0.6619	0.6619
	1.2761	1.2761	1.2183	1.3381	1.3381	1.3381
R3BD1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R3BM1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381

R3BU1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R3CM1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R4AD1W	0.0239	0.0239	0.0817	-0.0381	-0.0381	-0.0381
	0.5761	0.5761	0.5183	0.6381	0.6381	0.6381
R4AM1W	0.0497	0.0497	0.1056	-0.0110	-0.0110	-0.0110
	0.6170	0.6170	0.5611	0.6777	0.6777	0.6777
R4AU1W	-0.1761	-0.1761	-0.1183	-0.2381	-0.2381	-0.2381
	0.3761	0.3761	0.3183	0.4381	0.4381	0.4381
R4BD1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R4BM1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R4BU1W	-0.0761	-0.0761	-0.0183	-0.1381	-0.1381	-0.1381
	0.4761	0.4761	0.4183	0.5381	0.5381	0.5381
R4CM1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R4CM2W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R5AD1W	0.0239	0.0239	0.0817	-0.0381	-0.0381	-0.0381
	0.5761	0.5761	0.5183	0.6381	0.6381	0.6381
R5AM1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381

R5AN1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R5AU1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R5BD1W	-0.0761	-0.0761	-0.0183	-0.1381	-0.1381	-0.1381
	0.4761	0.4761	0.4183	0.5381	0.5381	0.5381
R5BM1W	-0.0761	-0.0761	-0.0183	-0.1381	-0.1381	-0.1381
	0.4761	0.4761	0.4183	0.5381	0.5381	0.5381
R5BN1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R5BU1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R5CM1W	-0.1761	-0.1761	-0.1183	-0.2381	-0.2381	-0.2381
	0.3761	0.3761	0.3183	0.4381	0.4381	0.4381
R6AD1W	-0.1761	-0.1761	-0.1183	-0.2381	-0.2381	-0.2381
	0.3761	0.3761	0.3183	0.4381	0.4381	0.4381
R6AM1W	0.0239	0.0239	0.0817	-0.0381	-0.0381	-0.0381
	0.5761	0.5761	0.5183	0.6381	0.6381	0.6381
R6AM2W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381
R6AU1W	-0.0761	-0.0761	-0.0183	-0.1381	-0.1381	-0.1381
	0.4761	0.4761	0.4183	0.5381	0.5381	0.5381
R6BM1W	-0.0761	-0.0761	-0.0183	-0.1381	-0.1381	-0.1381
	0.4761	0.4761	0.4183	0.5381	0.5381	0.5381

R6BU1W	-0.1761	-0.1761	-0.1183	-0.2381	-0.2381	-0.2381
	0.3761	0.3761	0.3183	0.4381	0.4381	0.4381
R6CM1W	-0.2761	-0.2761	-0.2183	-0.3381	-0.3381	-0.3381
	0.2761	0.2761	0.2183	0.3381	0.3381	0.3381

	R2AU1W	R2BD1W	R2BM1W	R2BU1W	R2CM1W	R3AD1W
R2BD1W	-0.3904					
	0.3904					
R2BM1W	-0.3904	-0.3904				
	0.3904	0.3904				
R2BU1W	-0.3904	-0.3904	-0.3904			
	0.3904	0.3904	0.3904			
R2CM1W	-0.3904	-0.3904	-0.3904	-0.3904		
	0.3904	0.3904	0.3904	0.3904		
R3AD1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	
	0.3381	0.3381	0.3381	0.3381	0.3381	
R3AM1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R3AU1W	0.6619	0.6619	0.6619	0.6619	0.6619	0.7239
	1.3381	1.3381	1.3381	1.3381	1.3381	1.2761
R3BD1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R3BM1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761

R3BU1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R3CM1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R4AD1W	-0.0381	-0.0381	-0.0381	-0.0381	-0.0381	0.0239
	0.6381	0.6381	0.6381	0.6381	0.6381	0.5761
R4AM1W	-0.0110	-0.0110	-0.0110	-0.0110	-0.0110	0.0497
	0.6777	0.6777	0.6777	0.6777	0.6777	0.6170
R4AU1W	-0.2381	-0.2381	-0.2381	-0.2381	-0.2381	-0.1761
	0.4381	0.4381	0.4381	0.4381	0.4381	0.3761
R4BD1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R4BM1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R4BU1W	-0.1381	-0.1381	-0.1381	-0.1381	-0.1381	-0.0761
	0.5381	0.5381	0.5381	0.5381	0.5381	0.4761
R4CM1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R4CM2W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R5AD1W	-0.0381	-0.0381	-0.0381	-0.0381	-0.0381	0.0239
	0.6381	0.6381	0.6381	0.6381	0.6381	0.5761
R5AM1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761

R5AN1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R5AU1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R5BD1W	-0.1381	-0.1381	-0.1381	-0.1381	-0.1381	-0.0761
	0.5381	0.5381	0.5381	0.5381	0.5381	0.4761
R5BM1W	-0.1381	-0.1381	-0.1381	-0.1381	-0.1381	-0.0761
	0.5381	0.5381	0.5381	0.5381	0.5381	0.4761
R5BN1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R5BU1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R5CM1W	-0.2381	-0.2381	-0.2381	-0.2381	-0.2381	-0.1761
	0.4381	0.4381	0.4381	0.4381	0.4381	0.3761
R6AD1W	-0.2381	-0.2381	-0.2381	-0.2381	-0.2381	-0.1761
	0.4381	0.4381	0.4381	0.4381	0.4381	0.3761
R6AM1W	-0.0381	-0.0381	-0.0381	-0.0381	-0.0381	0.0239
	0.6381	0.6381	0.6381	0.6381	0.6381	0.5761
R6AM2W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761
R6AU1W	-0.1381	-0.1381	-0.1381	-0.1381	-0.1381	-0.0761
	0.5381	0.5381	0.5381	0.5381	0.5381	0.4761
R6BM1W	-0.1381	-0.1381	-0.1381	-0.1381	-0.1381	-0.0761
	0.5381	0.5381	0.5381	0.5381	0.5381	0.4761

R6BU1W	-0.2381	-0.2381	-0.2381	-0.2381	-0.2381	-0.1761
	0.4381	0.4381	0.4381	0.4381	0.4381	0.3761
R6CM1W	-0.3381	-0.3381	-0.3381	-0.3381	-0.3381	-0.2761
	0.3381	0.3381	0.3381	0.3381	0.3381	0.2761

	R3AM1W	R3AU1W	R3BD1W	R3BM1W	R3BU1W	R3CM1W
R3AU1W	0.7239					
	1.2761					
R3BD1W	-0.2761	-1.2761				
	0.2761	-0.7239				
R3BM1W	-0.2761	-1.2761	-0.2761			
	0.2761	-0.7239	0.2761			
R3BU1W	-0.2761	-1.2761	-0.2761	-0.2761		
	0.2761	-0.7239	0.2761	0.2761		
R3CM1W	-0.2761	-1.2761	-0.2761	-0.2761	-0.2761	
	0.2761	-0.7239	0.2761	0.2761	0.2761	
R4AD1W	0.0239	-0.9761	0.0239	0.0239	0.0239	0.0239
	0.5761	-0.4239	0.5761	0.5761	0.5761	0.5761
R4AM1W	0.0497	-0.9503	0.0497	0.0497	0.0497	0.0497
	0.6170	-0.3830	0.6170	0.6170	0.6170	0.6170
R4AU1W	-0.1761	-1.1761	-0.1761	-0.1761	-0.1761	-0.1761
	0.3761	-0.6239	0.3761	0.3761	0.3761	0.3761
R4BD1W	-0.2761	-1.2761	-0.2761	-0.2761	-0.2761	-0.2761
	0.2761	-0.7239	0.2761	0.2761	0.2761	0.2761

R4BM1W	-0.2761	-1.2761	-0.2761	-0.2761	-0.2761	-0.2761
	0.2761	-0.7239	0.2761	0.2761	0.2761	0.2761
R4BU1W	-0.0761	-1.0761	-0.0761	-0.0761	-0.0761	-0.0761
	0.4761	-0.5239	0.4761	0.4761	0.4761	0.4761
R4CM1W	-0.2761	-1.2761	-0.2761	-0.2761	-0.2761	-0.2761
	0.2761	-0.7239	0.2761	0.2761	0.2761	0.2761
R4CM2W	-0.2761	-1.2761	-0.2761	-0.2761	-0.2761	-0.2761
	0.2761	-0.7239	0.2761	0.2761	0.2761	0.2761
R5AD1W	0.0239	-0.9761	0.0239	0.0239	0.0239	0.0239
	0.5761	-0.4239	0.5761	0.5761	0.5761	0.5761
R5AM1W	-0.2761	-1.2761	-0.2761	-0.2761	-0.2761	-0.2761
	0.2761	-0.7239	0.2761	0.2761	0.2761	0.2761
R5AN1W	-0.2761	-1.2761	-0.2761	-0.2761	-0.2761	-0.2761
	0.2761	-0.7239	0.2761	0.2761	0.2761	0.2761
R5AU1W	-0.2761	-1.2761	-0.2761	-0.2761	-0.2761	-0.2761
	0.2761	-0.7239	0.2761	0.2761	0.2761	0.2761
R5BD1W	-0.0761	-1.0761	-0.0761	-0.0761	-0.0761	-0.0761
	0.4761	-0.5239	0.4761	0.4761	0.4761	0.4761
R5BM1W	-0.0761	-1.0761	-0.0761	-0.0761	-0.0761	-0.0761
	0.4761	-0.5239	0.4761	0.4761	0.4761	0.4761
R5BN1W	-0.2761	-1.2761	-0.2761	-0.2761	-0.2761	-0.2761
	0.2761	-0.7239	0.2761	0.2761	0.2761	0.2761
R5BU1W	-0.2761	-1.2761	-0.2761	-0.2761	-0.2761	-0.2761
	0.2761	-0.7239	0.2761	0.2761	0.2761	0.2761

R5CM1W	-0.1761	-1.1761	-0.1761	-0.1761	-0.1761	-0.1761
	0.3761	-0.6239	0.3761	0.3761	0.3761	0.3761
R6AD1W	-0.1761	-1.1761	-0.1761	-0.1761	-0.1761	-0.1761
	0.3761	-0.6239	0.3761	0.3761	0.3761	0.3761
R6AM1W	0.0239	-0.9761	0.0239	0.0239	0.0239	0.0239
	0.5761	-0.4239	0.5761	0.5761	0.5761	0.5761
R6AM2W	-0.2761	-1.2761	-0.2761	-0.2761	-0.2761	-0.2761
	0.2761	-0.7239	0.2761	0.2761	0.2761	0.2761
R6AU1W	-0.0761	-1.0761	-0.0761	-0.0761	-0.0761	-0.0761
	0.4761	-0.5239	0.4761	0.4761	0.4761	0.4761
R6BM1W	-0.0761	-1.0761	-0.0761	-0.0761	-0.0761	-0.0761
	0.4761	-0.5239	0.4761	0.4761	0.4761	0.4761
R6BU1W	-0.1761	-1.1761	-0.1761	-0.1761	-0.1761	-0.1761
	0.3761	-0.6239	0.3761	0.3761	0.3761	0.3761
R6CM1W	-0.2761	-1.2761	-0.2761	-0.2761	-0.2761	-0.2761
	0.2761	-0.7239	0.2761	0.2761	0.2761	0.2761

	R4AD1W	R4AM1W	R4AU1W	R4BD1W	R4BM1W	R4BU1W
R4AM1W	-0.2503					
	0.3170					
R4AU1W	-0.4761	-0.5170				
	0.0761	0.0503				
R4BD1W	-0.5761	-0.6170	-0.3761			
	-0.0239	-0.0497	0.1761			

R4BM1W	-0.5761	-0.6170	-0.3761	-0.2761		
	-0.0239	-0.0497	0.1761	0.2761		
R4BU1W	-0.3761	-0.4170	-0.1761	-0.0761	-0.0761	
	0.1761	0.1503	0.3761	0.4761	0.4761	
R4CM1W	-0.5761	-0.6170	-0.3761	-0.2761	-0.2761	-0.4761
	-0.0239	-0.0497	0.1761	0.2761	0.2761	0.0761
R4CM2W	-0.5761	-0.6170	-0.3761	-0.2761	-0.2761	-0.4761
	-0.0239	-0.0497	0.1761	0.2761	0.2761	0.0761
R5AD1W	-0.2761	-0.3170	-0.0761	0.0239	0.0239	-0.1761
	0.2761	0.2503	0.4761	0.5761	0.5761	0.3761
R5AM1W	-0.5761	-0.6170	-0.3761	-0.2761	-0.2761	-0.4761
	-0.0239	-0.0497	0.1761	0.2761	0.2761	0.0761
R5AN1W	-0.5761	-0.6170	-0.3761	-0.2761	-0.2761	-0.4761
	-0.0239	-0.0497	0.1761	0.2761	0.2761	0.0761
R5AU1W	-0.5761	-0.6170	-0.3761	-0.2761	-0.2761	-0.4761
	-0.0239	-0.0497	0.1761	0.2761	0.2761	0.0761
R5BD1W	-0.3761	-0.4170	-0.1761	-0.0761	-0.0761	-0.2761
	0.1761	0.1503	0.3761	0.4761	0.4761	0.2761
R5BM1W	-0.3761	-0.4170	-0.1761	-0.0761	-0.0761	-0.2761
	0.1761	0.1503	0.3761	0.4761	0.4761	0.2761
R5BN1W	-0.5761	-0.6170	-0.3761	-0.2761	-0.2761	-0.4761
	-0.0239	-0.0497	0.1761	0.2761	0.2761	0.0761
R5BU1W	-0.5761	-0.6170	-0.3761	-0.2761	-0.2761	-0.4761
	-0.0239	-0.0497	0.1761	0.2761	0.2761	0.0761

R5CM1W	-0.4761	-0.5170	-0.2761	-0.1761	-0.1761	-0.3761
	0.0761	0.0503	0.2761	0.3761	0.3761	0.1761
R6AD1W	-0.4761	-0.5170	-0.2761	-0.1761	-0.1761	-0.3761
	0.0761	0.0503	0.2761	0.3761	0.3761	0.1761
R6AM1W	-0.2761	-0.3170	-0.0761	0.0239	0.0239	-0.1761
	0.2761	0.2503	0.4761	0.5761	0.5761	0.3761
R6AM2W	-0.5761	-0.6170	-0.3761	-0.2761	-0.2761	-0.4761
	-0.0239	-0.0497	0.1761	0.2761	0.2761	0.0761
R6AU1W	-0.3761	-0.4170	-0.1761	-0.0761	-0.0761	-0.2761
	0.1761	0.1503	0.3761	0.4761	0.4761	0.2761
R6BM1W	-0.3761	-0.4170	-0.1761	-0.0761	-0.0761	-0.2761
	0.1761	0.1503	0.3761	0.4761	0.4761	0.2761
R6BU1W	-0.4761	-0.5170	-0.2761	-0.1761	-0.1761	-0.3761
	0.0761	0.0503	0.2761	0.3761	0.3761	0.1761
R6CM1W	-0.5761	-0.6170	-0.3761	-0.2761	-0.2761	-0.4761
	-0.0239	-0.0497	0.1761	0.2761	0.2761	0.0761

	R4CM1W	R4CM2W	R5AD1W	R5AM1W	R5AN1W	R5AU1W
R4CM2W	-0.2761					
	0.2761					
R5AD1W	0.0239	0.0239				
	0.5761	0.5761				
R5AM1W	-0.2761	-0.2761	-0.5761			
	0.2761	0.2761	-0.0239			

R5AN1W	-0.2761	-0.2761	-0.5761	-0.2761		
	0.2761	0.2761	-0.0239	0.2761		
R5AU1W	-0.2761	-0.2761	-0.5761	-0.2761	-0.2761	
	0.2761	0.2761	-0.0239	0.2761	0.2761	
R5BD1W	-0.0761	-0.0761	-0.3761	-0.0761	-0.0761	-0.0761
	0.4761	0.4761	0.1761	0.4761	0.4761	0.4761
R5BM1W	-0.0761	-0.0761	-0.3761	-0.0761	-0.0761	-0.0761
	0.4761	0.4761	0.1761	0.4761	0.4761	0.4761
R5BN1W	-0.2761	-0.2761	-0.5761	-0.2761	-0.2761	-0.2761
	0.2761	0.2761	-0.0239	0.2761	0.2761	0.2761
R5BU1W	-0.2761	-0.2761	-0.5761	-0.2761	-0.2761	-0.2761
	0.2761	0.2761	-0.0239	0.2761	0.2761	0.2761
R5CM1W	-0.1761	-0.1761	-0.4761	-0.1761	-0.1761	-0.1761
	0.3761	0.3761	0.0761	0.3761	0.3761	0.3761
R6AD1W	-0.1761	-0.1761	-0.4761	-0.1761	-0.1761	-0.1761
	0.3761	0.3761	0.0761	0.3761	0.3761	0.3761
R6AM1W	0.0239	0.0239	-0.2761	0.0239	0.0239	0.0239
	0.5761	0.5761	0.2761	0.5761	0.5761	0.5761
R6AM2W	-0.2761	-0.2761	-0.5761	-0.2761	-0.2761	-0.2761
	0.2761	0.2761	-0.0239	0.2761	0.2761	0.2761
R6AU1W	-0.0761	-0.0761	-0.3761	-0.0761	-0.0761	-0.0761
	0.4761	0.4761	0.1761	0.4761	0.4761	0.4761
R6BM1W	-0.0761	-0.0761	-0.3761	-0.0761	-0.0761	-0.0761
	0.4761	0.4761	0.1761	0.4761	0.4761	0.4761

R6BU1W	-0.1761	-0.1761	-0.4761	-0.1761	-0.1761	-0.1761
	0.3761	0.3761	0.0761	0.3761	0.3761	0.3761
R6CM1W	-0.2761	-0.2761	-0.5761	-0.2761	-0.2761	-0.2761
	0.2761	0.2761	-0.0239	0.2761	0.2761	0.2761

	R5BD1W	R5BM1W	R5BN1W	R5BU1W	R5CM1W	R6AD1W
R5BM1W	-0.2761					
	0.2761					
R5BN1W	-0.4761	-0.4761				
	0.0761	0.0761				
R5BU1W	-0.4761	-0.4761	-0.2761			
	0.0761	0.0761	0.2761			
R5CM1W	-0.3761	-0.3761	-0.1761	-0.1761		
	0.1761	0.1761	0.3761	0.3761		
R6AD1W	-0.3761	-0.3761	-0.1761	-0.1761	-0.2761	
	0.1761	0.1761	0.3761	0.3761	0.2761	
R6AM1W	-0.1761	-0.1761	0.0239	0.0239	-0.0761	-0.0761
	0.3761	0.3761	0.5761	0.5761	0.4761	0.4761
R6AM2W	-0.4761	-0.4761	-0.2761	-0.2761	-0.3761	-0.3761
	0.0761	0.0761	0.2761	0.2761	0.1761	0.1761
R6AU1W	-0.2761	-0.2761	-0.0761	-0.0761	-0.1761	-0.1761
	0.2761	0.2761	0.4761	0.4761	0.3761	0.3761
R6BM1W	-0.2761	-0.2761	-0.0761	-0.0761	-0.1761	-0.1761
	0.2761	0.2761	0.4761	0.4761	0.3761	0.3761

R6BU1W	-0.3761	-0.3761	-0.1761	-0.1761	-0.2761	-0.2761
	0.1761	0.1761	0.3761	0.3761	0.2761	0.2761
R6CM1W	-0.4761	-0.4761	-0.2761	-0.2761	-0.3761	-0.3761
	0.0761	0.0761	0.2761	0.2761	0.1761	0.1761

	R6AM1W	R6AM2W	R6AU1W	R6BM1W	R6BU1W
R6AM2W	-0.5761				
	-0.0239				
R6AU1W	-0.3761	-0.0761			
	0.1761	0.4761			
R6BM1W	-0.3761	-0.0761	-0.2761		
	0.1761	0.4761	0.2761		
R6BU1W	-0.4761	-0.1761	-0.3761	-0.3761	
	0.0761	0.3761	0.1761	0.1761	
R6CM1W	-0.5761	-0.2761	-0.4761	-0.4761	-0.3761
	-0.0239	0.2761	0.0761	0.0761	0.1761

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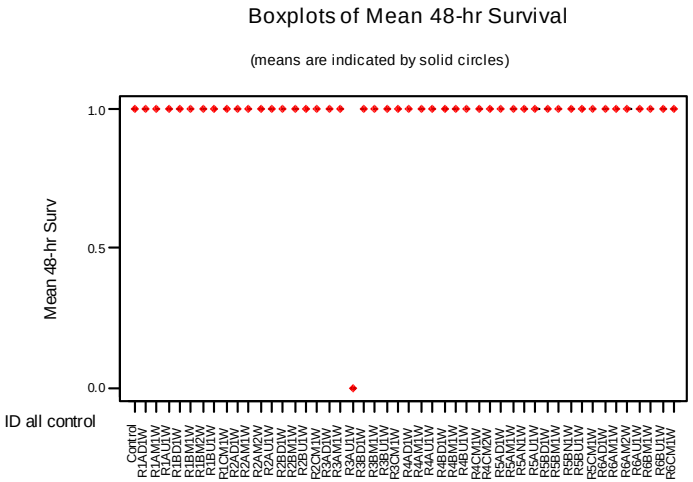
* NOTE * Existing file replaced.


Boxplots of Mean 48-hr Survival
(means are indicated by solid circles)
Mean 48-hr Surv
1.0
0.5
0.0
ID all control
Control
R1AD1W
R1AM1W
R1AU1W
R1BD1W
R1BM1W
R1BM2W
R1BU1W
R1CM1W
R2AD1W
R2AM1W
R2AM2W
R2AU1W
R2BD1W
R2BM1W
R2BU1W
R2CM1W
R3AD1W
R3AM1W
R3AU1W
R3BD1W
R3BM1W
R3BU1W
R3CM1W
R4AD1W
R4AM1W
R4AU1W
R4BD1W
R4BM1W
R4BU1W
R4CM1W
R4CM2W
R5AD1W
R5AM1W
R5AU1W
R5BD1W
R5BM1W
R5BN1W
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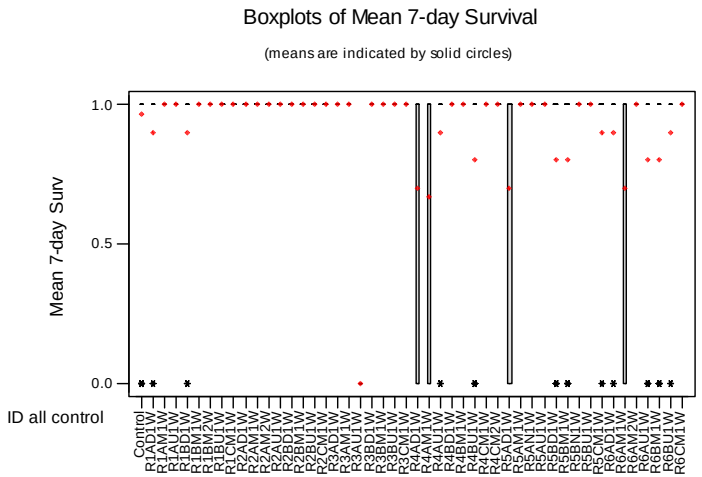
R6BU1W
R6CM1W


Boxplots of Mean 7-day Survival
(means are indicated by solid circles)
Mean 7-day Surv
1.0
0.5
0.0
ID all control
Control
R1AD1W
R1AM1W
R1AU1W
R1BD1W
R1BM1W
R1BM2W
R1BU1W
R1CM1W
R2AD1W
R2AM1W
R2AM2W
R2AU1W
R2BD1W
R2BM1W
R2BU1W
R2CM1W
R3AD1W
R3AM1W
R3AU1W
R3BD1W
R3BM1W
R3BU1W
R3CM1W
R4AD1W
R4AM1W
R4AU1W
R4BD1W
R4BM1W
R4BU1W
R4CM1W
R4CM2W
R5AD1W
R5AM1W
R5AU1W
R5BD1W
R5BM1W
R5BN1W
R5BU1W
R5CM1W
R6AD1W
R6AM1W
R6AM2W
R6AU1W
R6BM1W
R6BU1W
R6CM1W

Current worksheet: Ceriodaphnia's.MTW

One-way Analysis of Variance

************CERIODAPHNIA NEONATE PRODUCTION***********

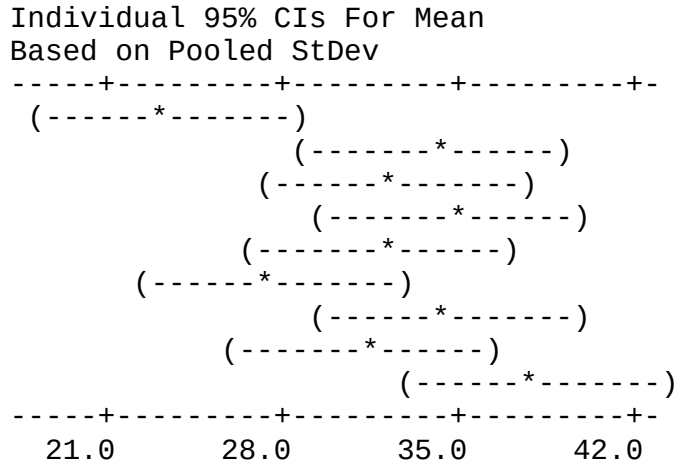
One-way Analysis of Variance

Analysis of Variance for R-1 NEONATE

Source	DF	SS	MS	F	P
R-1	8	1496.4	187.1	2.71	0.011
Error	81	5598.5	69.1		
Total	89	7094.9			

Level	N	Mean	StDev
Control	10	23.400	8.235
R1AD1W	10	34.100	6.806
R1AM1W	10	32.500	11.559
R1AU1W	10	34.900	4.332
R1BD1W	10	31.900	9.814
R1BM1W	10	27.600	11.937
R1BM2W	10	34.600	8.140
R1BU1W	10	31.300	6.734
R1CM1W	10	38.000	2.261

Pooled StDev = 8.314



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00818

```
Critical value = 2.71

Control = level (Control) of R-1

Level        Lower    Center     Upper ------+---------+---------+---------+-
R1AD1W       0.619    10.700    20.781        (---------*---------)
R1AM1W      -0.981     9.100    19.181      (---------*---------)
R1AU1W       1.419    11.500    21.581        (----------*---------)
R1BD1W      -1.581     8.500    18.581     (----------*---------)
R1BM1W      -5.881     4.200    14.281 (---------*---------)
R1BM2W       1.119    11.200    21.281        (---------*---------)
R1BU1W      -2.181     7.900    17.981     (---------*---------)
R1CM1W       4.519    14.600    24.681            (---------*---------)
                                      ------+---------+---------+---------+-
                                            0        10        20        30


Tukey's pairwise comparisons

    Family error rate = 0.0500
Individual error rate = 0.00203

Critical value = 4.51

Intervals for (column level mean) - (row level mean)

           Control     R1AD1W      R1AM1W      R1AU1W      R1BD1W      R1BM1W

 R1AD1W      -22.56
               1.16

 R1AM1W      -20.96      -10.26
               2.76       13.46

 R1AU1W      -23.36      -12.66      -14.26
               0.36       11.06        9.46
```

R1BD1W	-20.36	-9.66	-11.26	-8.86		
	3.36	14.06	12.46	14.86		
R1BM1W	-16.06	-5.36	-6.96	-4.56	-7.56	
	7.66	18.36	16.76	19.16	16.16	
R1BM2W	-23.06	-12.36	-13.96	-11.56	-14.56	-18.86
	0.66	11.36	9.76	12.16	9.16	4.86
R1BU1W	-19.76	-9.06	-10.66	-8.26	-11.26	-15.56
	3.96	14.66	13.06	15.46	12.46	8.16
R1CM1W	-26.46	-15.76	-17.36	-14.96	-17.96	-22.26
	-2.74	7.96	6.36	8.76	5.76	1.46

	R1BM2W	R1BU1W
R1BU1W	-8.56	
	15.16	
R1CM1W	-15.26	-18.56
	8.46	5.16

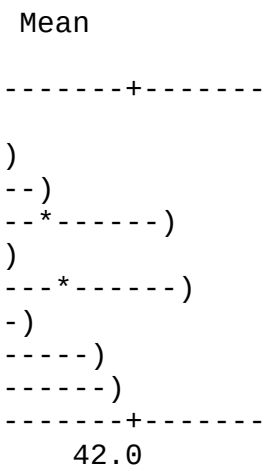
One-way Analysis of Variance

Analysis of Variance for R-2 Neon

Source	DF	SS	MS	F	P
R-2	8	872.2	109.0	2.50	0.018
Error	81	3528.1	43.6		
Total	89	4400.3			

Level	N	Mean	StDev
Control	10	28.800	7.700
R2AD1W	10	33.600	9.778
R2AM1W	10	34.800	8.854
R2AM2W	10	39.200	4.917
R2AU1W	10	33.700	5.851
R2BD1W	10	39.500	3.240
R2BM1W	10	34.500	8.515
R2BU1W	10	36.900	3.178
R2CM1W	10	37.100	2.685

Pooled StDev = 6.600



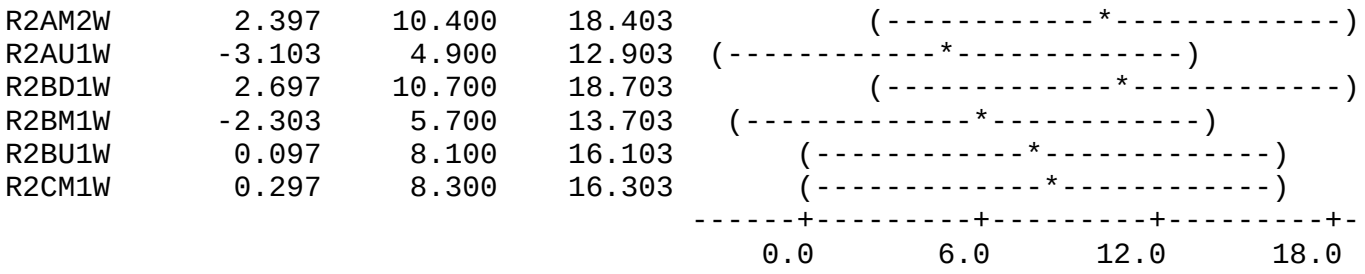
Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00818

Critical value = 2.71

Control = level (Control) of R-2

Level	Lower	Center	Upper
R2AD1W	-3.203	4.800	12.803
R2AM1W	-2.003	6.000	14.003



Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00203

Critical value = 4.51

Intervals for (column level mean) - (row level mean)

	Control	R2AD1W	R2AM1W	R2AM2W	R2AU1W	R2BD1W
R2AD1W	-14.212 4.612					
R2AM1W	-15.412 3.412	-10.612 8.212				
R2AM2W	-19.812 -0.988	-15.012 3.812	-13.812 5.012			
R2AU1W	-14.312 4.512	-9.512 9.312	-8.312 10.512	-3.912 14.912		
R2BD1W	-20.112 -1.288	-15.312 3.512	-14.112 4.712	-9.712 9.112	-15.212 3.612	

R2BM1W	-15.112	-10.312	-9.112	-4.712	-10.212	-4.412
	3.712	8.512	9.712	14.112	8.612	14.412
R2BU1W	-17.512	-12.712	-11.512	-7.112	-12.612	-6.812
	1.312	6.112	7.312	11.712	6.212	12.012
R2CM1W	-17.712	-12.912	-11.712	-7.312	-12.812	-7.012
	1.112	5.912	7.112	11.512	6.012	11.812

	R2BM1W	R2BU1W
R2BU1W	-11.812	
	7.012	
R2CM1W	-12.012	-9.612
	6.812	9.212

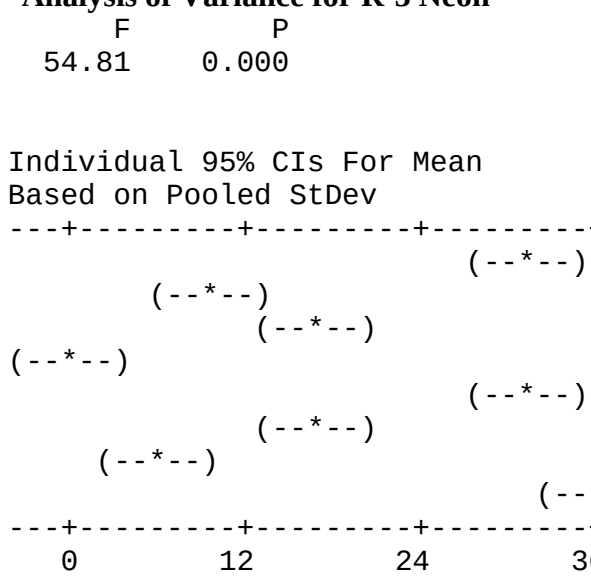
One-way Analysis of Variance

Analysis of Variance for R-3 Neon

Source	DF	SS	MS	F	P
R-3	7	12260.8	1751.5	54.81	0.000
Error	72	2300.8	32.0		
Total	79	14561.5			

Level	N	Mean	StDev
Control	10	31.200	7.983
R3AD1W	10	9.300	4.855
R3AM1W	10	17.300	5.794
R3AU1W	10	0.000	0.000
R3BD1W	10	31.700	7.804
R3BM1W	10	17.000	4.110
R3BU1W	10	6.100	6.173
R3CM1W	10	36.000	4.346

Pooled StDev = 5.653



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00918

Critical value = 2.68

Control = level (Control) of R-3

Level	Lower	Center	Upper
R3AD1W	-28.669	-21.900	-15.131
R3AM1W	-20.669	-13.900	-7.131
R3AU1W	-37.969	-31.200	-24.431
R3BD1W	-6.269	0.500	7.269
R3BM1W	-20.969	-14.200	-7.431

```
R3BU1W     -31.869   -25.100   -18.331      (---*----)
R3CM1W      -1.969     4.800    11.569                (---*----)
                                      ------+---------+---------+---------+-
                                          -30       -15         0        15


Tukey's pairwise comparisons

    Family error rate = 0.0500
Individual error rate = 0.00256

Critical value = 4.42

Intervals for (column level mean) - (row level mean)

           Control     R3AD1W      R3AM1W      R3AU1W      R3BD1W      R3BM1W

 R3AD1W      13.999
             29.801

 R3AM1W       5.999     -15.901
             21.801      -0.099

 R3AU1W      23.299       1.399       9.399
             39.101      17.201      25.201

 R3BD1W      -8.401     -30.301     -22.301     -39.601
              7.401     -14.499      -6.499     -23.799

 R3BM1W       6.299     -15.601      -7.601     -24.901       6.799
             22.101       0.201       8.201      -9.099      22.601

 R3BU1W      17.199      -4.701       3.299     -14.001      17.699       2.999
             33.001      11.101      19.101       1.801      33.501      18.801

 R3CM1W     -12.701     -34.601     -26.601     -43.901     -12.201     -26.901
```

	3.101	-18.799	-10.799	-28.099	3.601	-11.099

	R3BU1W
R3CM1W	-37.801 -21.999

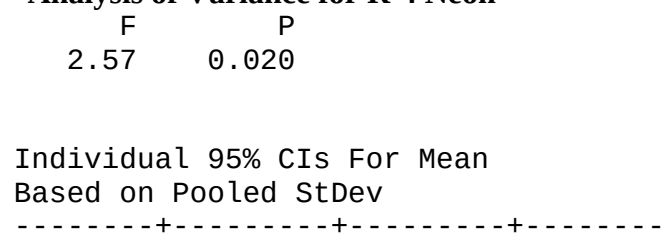
One-way Analysis of Variance

Analysis of Variance for R-4 Neon

Source	DF	SS	MS	F	P
R-4	7	2337	334	2.57	0.020
Error	71	9225	130		
Total	78	11561			

Level	N	Mean	StDev
Control	10	24.50	7.50
R4AD1W	10	9.20	10.95
R4AM1W	9	11.22	13.07
R4AU1W	10	16.70	10.03
R4BD1W	10	25.60	9.25
R4BM1W	10	21.60	12.75
R4CM1W	10	19.00	13.69
R4CM2W	10	18.00	12.68

Individual 95% CIs For Mean Based on Pooled StDev



Pooled StDev = 11.40

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00915

Critical value = 2.68

Control = level (Control) of R-4

Level	Lower	Center	Upper
R4AD1W	-28.96	-15.30	-1.64
R4AM1W	-27.31	-13.28	0.76
R4AU1W	-21.46	-7.80	5.86
R4BD1W	-12.56	1.10	14.76

```
R4BM1W      -16.56     -2.90     10.76            (-----------*----------)
R4CM1W      -19.16     -5.50      8.16          (-----------*-----------)
R4CM2W      -20.16     -6.50      7.16         (-----------*----------)
                                       -----+---------+---------+---------+--
                                          -24       -12         0        12
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00257

Critical value = 4.42

Intervals for (column level mean) - (row level mean)

	Control	R4AD1W	R4AM1W	R4AU1W	R4BD1W	R4BM1W
R4AD1W	-0.63 31.23					
R4AM1W	-3.09 29.65	-18.39 14.35				
R4AU1W	-8.13 23.73	-23.43 8.43	-21.85 10.89			
R4BD1W	-17.03 14.83	-32.33 -0.47	-30.75 1.99	-24.83 7.03		
R4BM1W	-13.03 18.83	-28.33 3.53	-26.75 5.99	-20.83 11.03	-11.93 19.93	
R4CM1W	-10.43 21.43	-25.73 6.13	-24.15 8.59	-18.23 13.63	-9.33 22.53	-13.33 18.53

R4CM2W	-9.43	-24.73	-23.15	-17.23	-8.33	-12.33
	22.43	7.13	9.59	14.63	23.53	19.53

	R4CM1W
R4CM2W	-14.93
	16.93

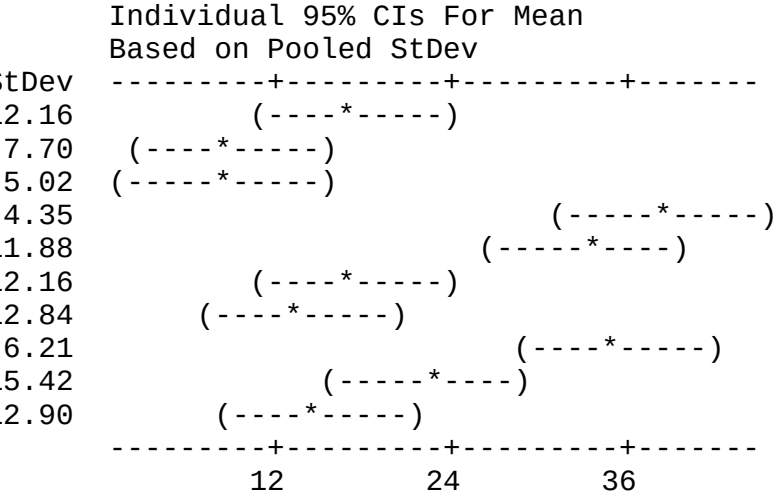
One-way Analysis of Variance

Analysis of Variance for R-5 Neon

Source	DF	SS	MS	F	P
R-5	9	10731	1192	10.39	0.000
Error	90	10331	115		
Total	99	21063			

Level	N	Mean	StDev
Control	10	17.00	12.16
R5AD1W	10	9.00	7.70
R5AM1W	10	8.50	5.02
R5AN1W	10	38.40	4.35
R5AU1W	10	33.10	11.88
R5BD1W	10	17.00	12.16
R5BM1W	10	13.80	12.84
R5BN1W	10	35.20	6.21
R5BU1W	10	22.50	15.42
R5CM1W	10	15.00	12.90

Pooled StDev = 10.71



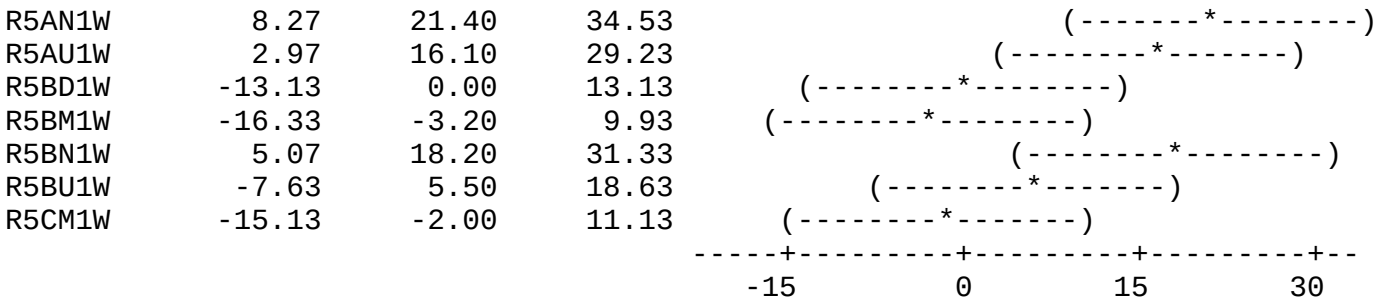
Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00739

Critical value = 2.74

Control = level (Control) of R-5

Level	Lower	Center	Upper
R5AD1W	-21.13	-8.00	5.13
R5AM1W	-21.63	-8.50	4.63



Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00165

Critical value = 4.59

Intervals for (column level mean) - (row level mean)

	Control	R5AD1W	R5AM1W	R5AN1W	R5AU1W	R5BD1W
R5AD1W	-7.55 23.55					
R5AM1W	-7.05 24.05	-15.05 16.05				
R5AN1W	-36.95 -5.85	-44.95 -13.85	-45.45 -14.35			
R5AU1W	-31.65 -0.55	-39.65 -8.55	-40.15 -9.05	-10.25 20.85		
R5BD1W	-15.55 15.55	-23.55 7.55	-24.05 7.05	5.85 36.95	0.55 31.65	

R5BM1W	-12.35	-20.35	-20.85	9.05	3.75	-12.35
	18.75	10.75	10.25	40.15	34.85	18.75
R5BN1W	-33.75	-41.75	-42.25	-12.35	-17.65	-33.75
	-2.65	-10.65	-11.15	18.75	13.45	-2.65
R5BU1W	-21.05	-29.05	-29.55	0.35	-4.95	-21.05
	10.05	2.05	1.55	31.45	26.15	10.05
R5CM1W	-13.55	-21.55	-22.05	7.85	2.55	-13.55
	17.55	9.55	9.05	38.95	33.65	17.55

	R5BM1W	R5BN1W	R5BU1W
R5BN1W	-36.95		
	-5.85		
R5BU1W	-24.25	-2.85	
	6.85	28.25	
R5CM1W	-16.75	4.65	-8.05
	14.35	35.75	23.05

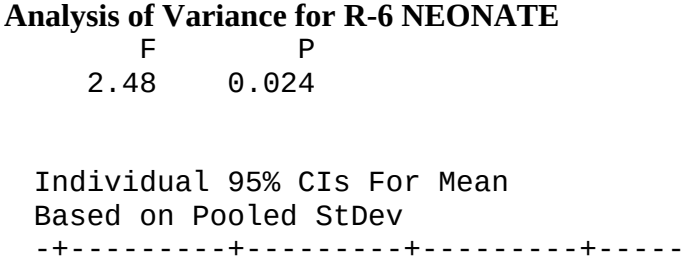
One-way Analysis of Variance

Analysis of Variance for R-6 NEONATE

Source	DF	SS	MS	F	P
R-6	7	3573	510	2.48	0.024
Error	72	14821	206		
Total	79	18394			

Level	N	Mean	StDev
Control	10	26.10	10.67
R6AD1W	10	19.50	12.83
R6AM1W	10	20.70	18.14
R6AM2W	10	30.80	11.41
R6AU1W	10	18.10	16.85
R6BM1W	10	8.30	13.41
R6BU1W	10	19.40	17.13
R6CM1W	10	28.90	12.32

Pooled StDev = 14.35



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00918

Critical value = 2.68

Control = level (Control) of R-6

Level	Lower	Center	Upper
R6AD1W	-23.78	-6.60	10.58
R6AM1W	-22.58	-5.40	11.78
R6AM2W	-12.48	4.70	21.88
R6AU1W	-25.18	-8.00	9.18

```
R6BM1W      -34.98    -17.80     -0.62  (----------*----------)
R6BU1W      -23.88     -6.70     10.48         (----------*----------)
R6CM1W      -14.38      2.80     19.98               (----------*----------)
                                      ----+---------+---------+---------+---
                                        -30       -15         0        15
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00256

Critical value = 4.42

Intervals for (column level mean) - (row level mean)

	Control	R6AD1W	R6AM1W	R6AM2W	R6AU1W	R6BM1W
R6AD1W	-13.45 26.65					
R6AM1W	-14.65 25.45	-21.25 18.85				
R6AM2W	-24.75 15.35	-31.35 8.75	-30.15 9.95			
R6AU1W	-12.05 28.05	-18.65 21.45	-17.45 22.65	-7.35 32.75		
R6BM1W	-2.25 37.85	-8.85 31.25	-7.65 32.45	2.45 42.55	-10.25 29.85	
R6BU1W	-13.35 26.75	-19.95 20.15	-18.75 21.35	-8.65 31.45	-21.35 18.75	-31.15 8.95

R6CM1W	-22.85	-29.45	-28.25	-18.15	-30.85	-40.65
	17.25	10.65	11.85	21.95	9.25	-0.55

	R6BU1W
R6CM1W	-29.55
	10.55

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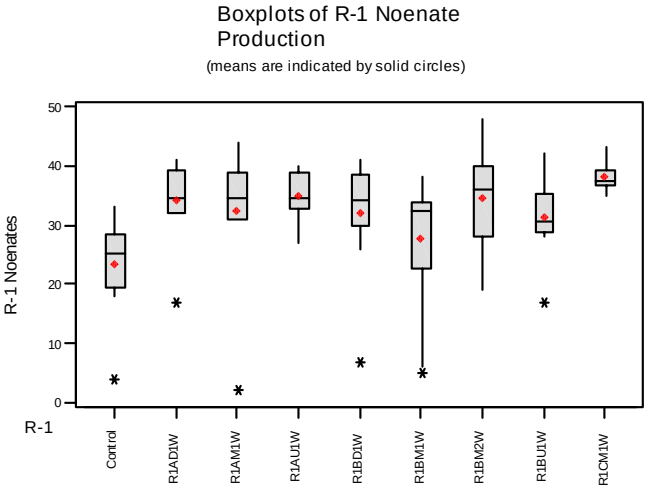
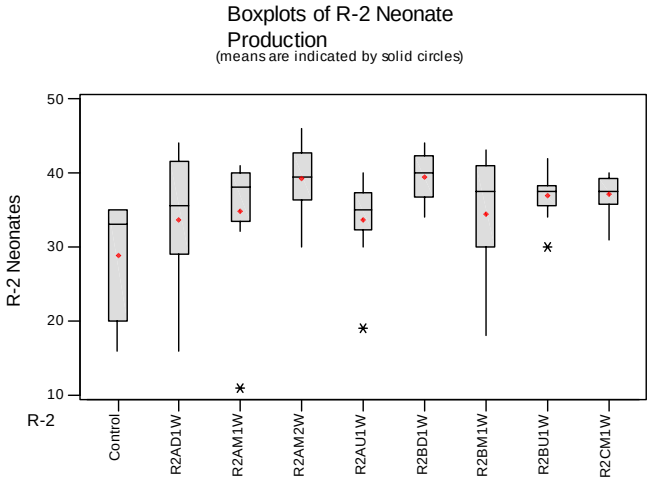
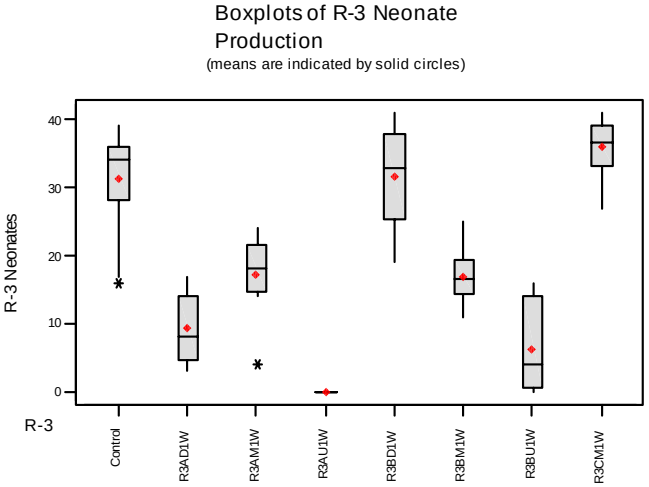
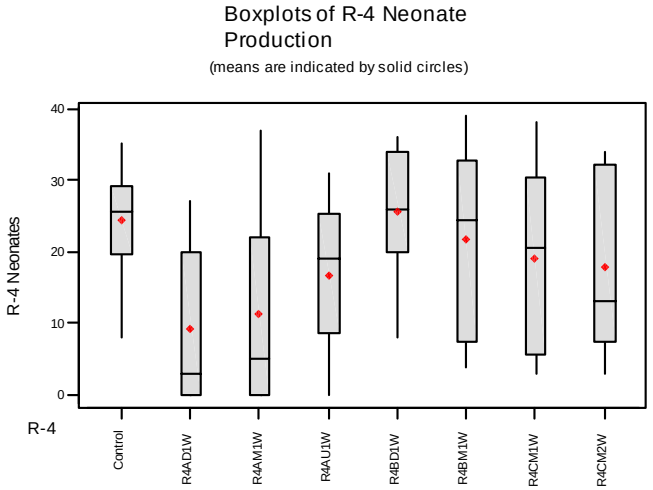
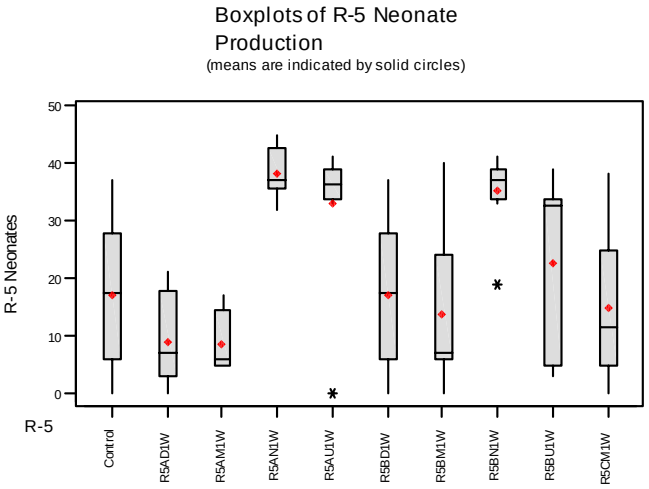
* NOTE * Existing file replaced.

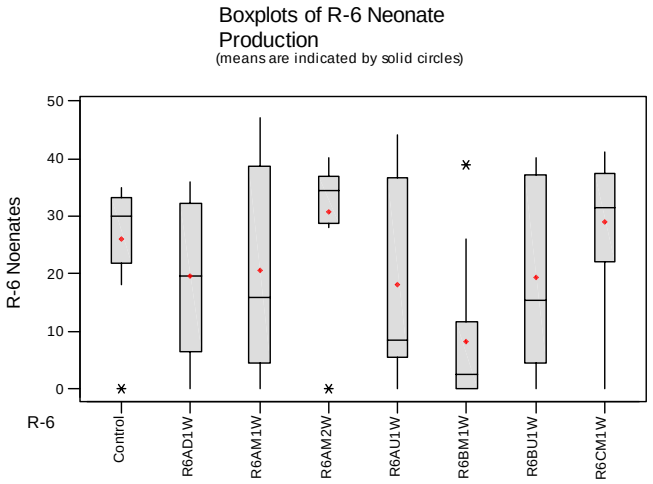

Boxplots of R-1 Noenate Production
(means are indicated by solid circles)
R-1 Noenates
R-1
Control
R1AD1W
R1AM1W
R1AU1W
R1BD1W
R1BM1W
R1BM2W
R1BU1W
R1CM1W


Boxplots of R-2 Neonate Production
(means are indicated by solid circles)
R-2 Neonates
R-2
Control
R2AD1W
R2AM1W
R2AM2W
R2AU1W
R2BD1W
R2BM1W
R2BU1W
R2CM1W


Boxplots of R-3 Neonate Production
(means are indicated by solid circles)
R-3 Neonates
R-3
Control
R3AD1W
R3AM1W
R3AU1W
R3BD1W
R3BM1W
R3BU1W
R3CM1W


Boxplots of R-4 Neonate Production
(means are indicated by solid circles)
R-4 Neonates
R-4
Control
R4AD1W
R4AM1W
R4AU1W
R4BD1W
R4BM1W
R4CM1W
R4CM2W


Boxplots of R-5 Neonate Production
(means are indicated by solid circles)
R-5 Neonates
50
40
30
20
10
0
R-5
Control
R5AD1W
R5AM1W
R5AN1W
R5AU1W
R5BD1W
R5BM1W
R5BN1W
R5BU1W
R5CM1W


Boxplots of R-6 Neonate Production
(means are indicated by solid circles)
R-6 Noenates
50
40
30
20
10
0
R-6
Control
R6AD1W
R6AM1W
R6AM2W
R6AU1W
R6BM1W
R6BU1W
R6CM1W

AMEC - Sauget

Site R1

Pimephales Summary Results

Chronic

Site	Rep	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	9	90		3.17	0.35	
	B	10	100		3.07	0.31	
	C	9	90		2.97	0.33	
	D	10	100	95	3.73	0.37	0.34
R1AU1W	A	9	90		3.49	0.39	
	B	10	100		3.13	0.31	
	C	10	100		3.00	0.30	
	D	8	80	93	3.40	0.43	0.36
R1AD1W	A	6	60		3.19	0.53	
	B	10	100		3.14	0.31	
	C	10	100		3.10	0.31	
	D	10	100	90	3.39	0.34	0.37
R1BM2W	A	10	100		2.86	0.29	
	B	10	100		3.02	0.30	
	C	9	90		2.45	0.27	
	D	10	100	98	3.06	0.31	0.29
R1CM1W	A	10	100		3.65	0.37	
	B	10	100		3.28	0.33	
	C	9	90		3.46	0.38	
	D	10	100	98	3.49	0.35	0.36
R1AM1W	A	10	100		3.38	0.34	
	B	10	100		3.55	0.36	
	C	10	100		2.86	0.29	
	D	10	100	100	3.39	0.34	0.33
R1BD1W	A	10	100		3.57	0.36	
	B	10	100		3.58	0.36	
	C	8	80		3.23	0.40	
	D	10	100	95	3.23	0.32	0.36
R1BM1W	A	10	100		2.57	0.26	
	B	10	100		3.63	0.36	
	C	10	100		3.63	0.36	
	D	10	100	100	3.38	0.34	0.33
R1BU1W	A	10	100		3.23	0.32	
	B	8	80		3.45	0.43	
	C	10	100		3.51	0.35	
	D	10	100	95	3.62	0.36	0.37

Acute - 96 hour Survival

Site	Rep	# Alive	% Survival	Mean % Survival
CONTROL	A	9	90	
	B	10	100	
	C	10	100	
	D	10	100	98
R1AU1W	A	9	90	
	B	10	100	
	C	10	100	
	D	10	100	98
R1AD1W	A	6	60	
	B	10	100	
	C	10	100	
	D	10	100	90
R1BM2W	A	10	100	
	B	10	100	
	C	10	100	
	D	10	100	100
R1CM1W	A	10	100	
	B	10	100	
	C	10	100	
	D	10	100	100
R1AM1W	A	10	100	
	B	10	100	
	C	10	100	
	D	10	100	100
R1BD1W	A	10	100	
	B	10	100	
	C	9	90	
	D	10	100	98
R1BM1W	A	10	100	
	B	10	100	
	C	10	100	
	D	10	100	100
R1BU1W	A	10	100	
	B	8	80	
	C	10	100	
	D	10	100	95

AMEC - Sauget
Site R2
***Pimephales* Summary Results**
Chronic

Site	Rep	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	10	100		3.78	0.38	
	B	10	100		4.25	0.43	
	C	9	90		4.03	0.45	
	D	10	100	98	3.70	0.37	0.41
R2AM2W	A	10	100		3.78	0.38	
	B	7	70		2.96	0.42	
	C	10	100		3.76	0.38	
	D	9	90	90	3.33	0.37	0.39
R2AD1W	A	10	100		3.83	0.38	
	B	8	80		3.29	0.41	
	C	9	90		3.35	0.37	
	D	9	90	90	3.87	0.43	0.40
R2AU1W	A	10	100		3.45	0.35	
	B	10	100		3.74	0.37	
	C	10	100		3.85	0.39	
	D	10	100	100	3.51	0.35	0.36
R2AM1W	A	9	90		3.60	0.40	
	B	10	100		3.98	0.40	
	C	10	100		3.31	0.33	
	D	9	90	95	3.27	0.36	0.37
R2BM1W	A	10	100		3.97	0.40	
	B	9	90		3.21	0.36	
	C	10	100		3.74	0.37	
	D	10	100	97.5	3.37	0.34	0.37
R2CM1W	A	10	100		3.75	0.38	
	B	9	90		3.48	0.39	
	C	9	90		3.77	0.42	
	D	10	100	95	4.19	0.42	0.40
R2BD1W	A	10	100		3.40	0.34	
	B	9	90		3.38	0.38	
	C	10	100		3.60	0.36	
	D	10	100	97.5	3.23	0.32	0.35
R2BU1W	A	7	70		2.71	0.39	
	B	9	90		3.49	0.39	
	C	9	90		3.44	0.38	
	D	10	100	87.5	3.44	0.34	0.38

Acute - 96 hour Survival

Site	Rep	# Alive	% Survival	Mean % Survival
CONTROL	A	10	100	
	B	10	100	
	C	9	90	
	D	10	100	98
R2AM2W	A	10	100	
	B	7	70	
	C	10	100	
	D	9	90	90
R2AD1W	A	10	100	
	B	8	80	
	C	10	100	
	D	9	90	92.5
R2AU1W	A	10	100	
	B	10	100	
	C	10	100	
	D	10	100	100
R2AM1W	A	9	90	
	B	10	100	
	C	10	100	
	D	10	100	98
R2BM1W	A	10	100	
	B	9	90	
	C	10	100	
	D	10	100	97.5
R2CM1W	A	10	100	
	B	9	90	
	C	10	100	
	D	10	100	98
R2BD1W	A	10	100	
	B	9	90	
	C	10	100	
	D	10	100	97.5
R2BU1W	A	8	80	
	B	9	90	
	C	9	90	
	D	10	100	90

AMEC - Sauget

Site R3

***Pimephales* Summary Results**

Chronic

Site	Rep	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	10	100		2.96	0.30	
	B	9	90		2.87	0.32	
	C	10	100		3.18	0.32	
	D	9	90	95	2.68	0.30	0.31
R3AM1W	A	10	100		3.65	0.37	
	B	10	100		4.09	0.41	
	C	8	80		3.25	0.41	
	D	9	90	93	3.13	0.35	0.38
R3AD1W	A	10	100		2.90	0.29	
	B	10	100		3.29	0.33	
	C	10	100		3.08	0.31	
	D	9	90	98	3.02	0.34	0.32
R3BD1W	A	10	100		2.84	0.28	
	B	10	100		3.20	0.32	
	C	9	90		2.95	0.33	
	D	9	90	95	2.79	0.31	0.31
R3BM1W	A	9	90		3.33	0.37	
	B	9	90		3.60	0.40	
	C	9	90		3.45	0.38	
	D	10	100	93	3.47	0.35	0.38
R3CM1W	A	10	100		2.84	0.28	
	B	10	100		3.43	0.34	
	C	10	100		3.58	0.36	
	D	9	90	98	3.19	0.35	0.33
R3AU1W	A	9	90		3.01	0.33	
	B	10	100		2.86	0.29	
	C	8	80		2.65	0.33	
	D	8	80	88	2.61	0.33	0.32
R3BU1W	A	9	90		2.98	0.33	
	B	10	100		3.14	0.31	
	C	9	90		2.68	0.30	
	D	10	100	95	3.39	0.34	0.32

Acute - 96 hour Survival

Site	Rep	# Alive	% Survival	Mean % Survival
CONTROL	A	10	100	
	B	10	100	
	C	10	100	
	D	9	90	98
R3AM1W	A	10	100	
	B	10	100	
	C	8	80	
	D	10	100	95
R3AD1W	A	10	100	
	B	10	100	
	C	10	100	
	D	9	90	98
R3BD1W	A	10	100	
	B	10	100	
	C	10	100	
	D	9	90	98
R3BM1W	A	9	90	
	B	9	90	
	C	9	90	
	D	10	100	93
R3CM1W	A	10	100	
	B	10	100	
	C	10	100	
	D	10	100	100
R3AU1W	A	10	100	
	B	10	100	
	C	10	100	
	D	9	90	98
R3BU1W	A	9	90	
	B	10	100	
	C	9	90	
	D	10	100	95

AMEC - Sauget
Site R4
***Pimephales* Summary Results**
Chronic

Site	Rep	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	10	100		4.61	0.46	
	B	10	100		4.31	0.43	
	C	9	90		4.13	0.46	
	D	10	100	98	4.19	0.42	0.44
R4BD1W	A	10	100		3.98	0.40	
	B	10	100		4.22	0.42	
	C	8	80		3.64	0.46	
	D	10	100	95	4.07	0.41	0.42
R4AD1W	A	8	80		4.04	0.51	
	B	9	90		4.09	0.45	
	C	8	80		3.58	0.45	
	D	6	60	78	3.18	0.53	0.48
R4AM1W	A	8	80		3.78	0.47	
	B	10	100		3.86	0.39	
	C	10	100		3.87	0.39	
	D	10	100	95	4.01	0.40	0.41
R4CM1W	A	10	100		4.48	0.45	
	B	10	100		4.38	0.44	
	C	3	30		2.36	0.79	
	D	9	90	80	4.08	0.45	0.53
R4CM2W	A	8	80		4.08	0.51	
	B	10	100		4.64	0.46	
	C	10	100		4.08	0.41	
	D	9	90	93	4.64	0.52	0.47
R4AU1W	A	9	90		4.30	0.48	
	B	10	100		4.09	0.41	
	C	8	80		4.31	0.54	
	D	10	100	93	4.12	0.41	0.46
R4BU1W	A	10	100		4.40	0.44	
	B	10	100		4.20	0.42	
	C	10	100		3.85	0.39	
	D	10	100	100	4.34	0.43	0.42
R4BM1W	A	10	100		4.66	0.47	
	B	10	100		4.33	0.43	
	C[a]	11	100		4.37	0.40	
	D	8	80	95	3.56	0.45	0.44

Acute - 96 hour Survival

Site	Rep	# Alive	% Survival	Mean % Survival
CONTROL	A	10	100	
	B	10	100	
	C	9	90	
	D	10	100	98
R4BD1W	A	10	100	
	B	10	100	
	C	8	80	
	D	10	100	95
R4AD1W	A	9	90	
	B	9	90	
	C	8	80	
	D	6	60	80
R4AM1W	A	9	90	
	B	10	100	
	C	10	100	
	D	10	100	98
R4CM1W	A	10	100	
	B	10	100	
	C	5	50	
	D	9	90	85
R4CM2W	A	10	100	
	B	10	100	
	C	10	100	
	D	9	90	98
R4AU1W	A	9	90	
	B	10	100	
	C	8	80	
	D	10	100	93
R4BU1W	A	10	100	
	B	10	100	
	C	10	100	
	D	10	100	100
R4BM1W	A	10	100	
	B	10	100	
	C[a]	11	100	
	D	9	90	98

[a] - initiated with 11 larvae

AMEC -Sauget

Site R5

Pimephales Summary Results

Chronic

Site	Rep	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	10	100		3.73	0.37	
	B	9	90		3.49	0.39	
	C	10	100		3.61	0.36	
	D	10	100	98	3.66	0.37	0.37
R5AD1W	A	10	100		3.30	0.33	
	B	8	80		3.18	0.40	
	C	9	90		3.24	0.36	
	D	na	na	90	na	na	0.36
R5AM1W	A	9	90		3.41	0.38	
	B	10	100		3.49	0.35	
	C	8	80		3.26	0.41	
	D	8	80	88	2.49	0.31	0.36
R5AU1W	A	10	100		3.61	0.36	
	B	10	100		3.89	0.39	
	C	10	100		3.74	0.37	
	D	10	100	100	3.53	0.35	0.37
R5BD1W	A	10	100		3.57	0.36	
	B	10	100		4.07	0.41	
	C	9	90		3.35	0.37	
	D	8	80	93	2.86	0.36	0.37
R5BU1W	A	10	100		3.02	0.30	
	B	10	100		3.85	0.39	
	C	9	90		3.20	0.36	
	D	8	80	93	3.04	0.38	0.36
R5BM1W	A	9	90		3.49	0.39	
	B	9	90		4.06	0.45	
	C	10	100		4.17	0.42	
	D	10	100	95	4.29	0.43	0.42
R5CM1W	A	10	100		3.58	0.36	
	B	7	70		3.27	0.47	
	C	10	100		3.74	0.37	
	D	10	100	93	3.32	0.33	0.38
R5BN1W	A	10	100		3.89	0.39	
	B	9	90		3.47	0.39	
	C	6	60		2.73	0.46	
	D	10	100	88	3.91	0.39	0.41

R5AN1W	A	9	90		3.31	0.37	
	B	10	100		4.28	0.43	
	C	10	100		3.55	0.36	
	D	10	100	98	3.72	0.37	0.38

na - replicate spilled during test period; fish lost

Acute - 96 hour Survival

Site	Rep	# Alive	% Survival	Mean % Survival
CONTROL	A	10	100	
	B	10	100	
	C	10	100	
	D	10	100	100
R5AD1W	A	10	100	
	B	9	90	
	C	10	100	
	D	9	90	95
R5AM1W	A	9	90	
	B	10	100	
	C	8	80	
	D	9	90	90
R5AU1W	A	10	100	
	B	10	100	
	C	10	100	
	D	10	100	100
R5BD1W	A	10	100	
	B	10	100	
	C	10	100	
	D	9	90	98
R5BU1W	A	10	100	
	B	10	100	
	C	9	90	
	D	8	80	93
R5BM1W	A	10	100	
	B	9	90	
	C	10	100	
	D	10	100	98
R5CM1W	A	10	100	
	B	7	70	
	C	10	100	
	D	10	100	93

Mean

Site	Rep	# Alive	% Survival	% Survival
R5BN1W	A	10	100	
	B	9	90	
	C	6	60	
	D	10	100	88
R5AN1W	A	9	90	
	B	10	100	
	C	10	100	
	D	10	100	98

AMEC - Sauget
Site R6
Pimephales Summary Results

Chronic

Site	Rep	# Alive	% Survival	Mean % Survival	Total Weight (mg)	Weight per Org (mg)	Mean Wt. per Org (mg)
CONTROL	A	7	70		2.92	0.42	
	B	9	90		3.26	0.36	
	C	10	100		3.89	0.39	
	D	10	100	90	3.73	0.37	0.39
R6AU1W	A	10	100		3.17	0.32	
	B	10	100		3.29	0.33	
	C	9	90		2.82	0.31	
	D	9	90	95	3.47	0.39	0.34
R6AD1W	A	9	90		3.42	0.38	
	B	10	100		3.38	0.34	
	C	10	100		3.09	0.31	
	D	10	100	98	3.33	0.33	0.34
R6BU1W	A	10	100		3.14	0.31	
	B	9	90		3.41	0.38	
	C	10	100		3.34	0.33	
	D	10	100	98	3.13	0.31	0.33
R6BM1W	A	9	90		3.47	0.39	
	B	10	100		3.57	0.36	
	C	10	100		3.52	0.35	
	D	5	50	85	1.94	0.39	0.37
R6CM1W	A	9	90		3.33	0.37	
	B	10	100		3.41	0.34	
	C	9	90		3.30	0.37	
	D	10	100	95	3.42	0.34	0.35
R6AM2W	A	10	100		3.12	0.31	
	B	9	90		3.31	0.37	
	C	10	100		3.17	0.32	
	D	10	100	98	3.04	0.30	0.33
R6AM1W	A	7	70		3.04	0.43	
	B	10	100		3.62	0.36	
	C	10	100		3.66	0.37	
	D	10	100	93	3.31	0.33	0.37

Acute - 96 hour Survival

Site	Rep	# Alive	% Survival	Mean % Survival
CONTROL	A	7	70	
	B	10	100	
	C	10	100	
	D	10	100	93
R6AU1W	A	10	100	
	B	10	100	
	C	9	90	
	D	9	90	95
R6AD1W	A	9	90	
	B	10	100	
	C	10	100	
	D	10	100	98
R6BU1W	A	10	100	
	B	10	100	
	C	10	100	
	D	10	100	100
R6BM1W	A	10	100	
	B	10	100	
	C	10	100	
	D	8	80	95
R6CM1W	A	9	90	
	B	10	100	
	C	9	90	
	D	10	100	95
R6AM2W	A	10	100	
	B	9	90	
	C	10	100	
	D	10	100	98
R6AM1W	A	7	70	
	B	10	100	
	C	10	100	
	D	10	100	93

********** PIMEPHALES CHRONIC AND ACUTE **********

One-way Analysis of Variance

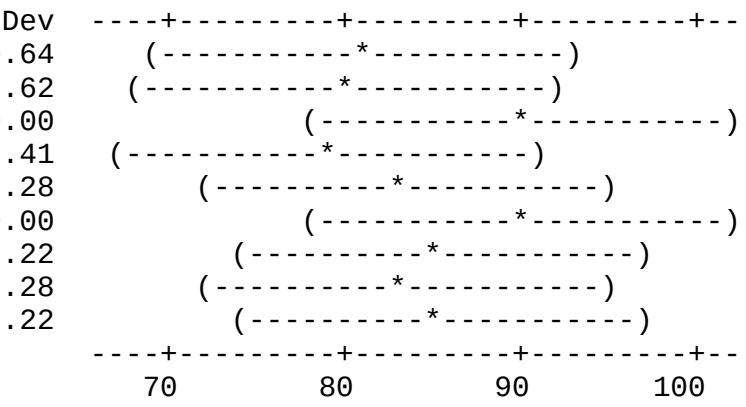
Analysis of Variance for R-1 Chronic Survival

Source	DF	SS	MS	F	P
R-1	8	516	64	0.48	0.857
Error	27	3602	133		
Total	35	4118			

Level	N	Mean	StDev
CONTROL	4	80.78	10.64
R1AD1W	4	80.19	19.62
R1AM1W	4	90.00	0.00
R1AU1W	4	78.75	13.41
R1BD1W	4	83.36	13.28
R1BM1W	4	90.00	0.00
R1BM2W	4	85.39	9.22
R1BU1W	4	83.36	13.28
R1CM1W	4	85.39	9.22

Pooled StDev = 11.55

Individual 95% CIs For Mean Based on Pooled StDev



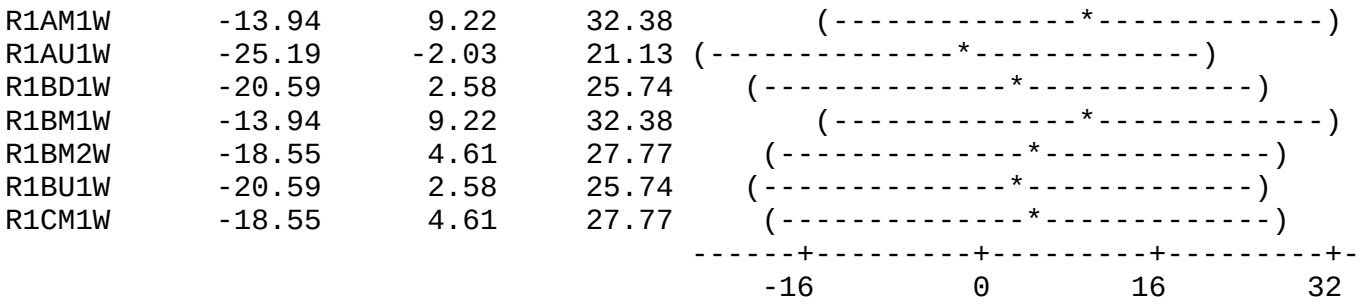
Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00855

Critical value = 2.84

Control = level (CONTROL) of R-1

Level	Lower	Center	Upper
R1AD1W	-23.75	-0.59	22.57



Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00230

Critical value = 4.76

Intervals for (column level mean) - (row level mean)

	CONTROL	R1AD1W	R1AM1W	R1AU1W	R1BD1W	R1BM1W
R1AD1W	-26.90 28.08					
R1AM1W	-36.71 18.27	-37.30 17.68				
R1AU1W	-25.46 29.52	-26.05 28.93	-16.24 38.74			
R1BD1W	-30.06 24.91	-30.66 24.32	-20.85 34.13	-32.10 22.88		
R1BM1W	-36.71 18.27	-37.30 17.68	-27.49 27.49	-38.74 16.24	-34.13 20.85	

R1BM2W	-32.10	-32.69	-22.88	-34.13	-29.52	-22.88
	22.88	22.29	32.10	20.85	25.46	32.10
R1BU1W	-30.06	-30.66	-20.85	-32.10	-27.49	-20.85
	24.91	24.32	34.13	22.88	27.49	34.13
R1CM1W	-32.10	-32.69	-22.88	-34.13	-29.52	-22.88
	22.88	22.29	32.10	20.85	25.46	32.10

	R1BM2W	R1BU1W
R1BU1W	-25.46	
	29.52	
R1CM1W	-27.49	-29.52
	27.49	25.46

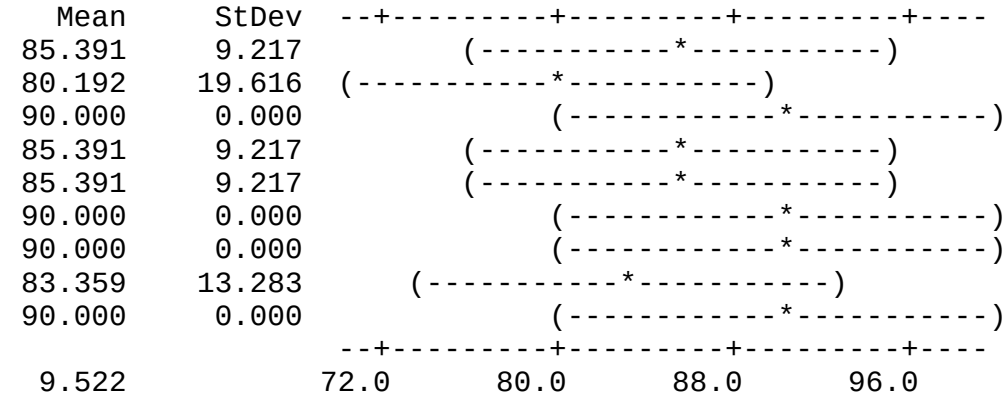
One-way Analysis of Variance

Analysis of Variance for R-1 Acute Survival

Source	DF	SS	MS	F	P
R-1	8	408.7	51.1	0.56	0.798
Error	27	2448.3	90.7		
Total	35	2857.0			

Level	N	Mean	StDev
CONTROL	4	85.391	9.217
R1AD1W	4	80.192	19.616
R1AM1W	4	90.000	0.000
R1AU1W	4	85.391	9.217
R1BD1W	4	85.391	9.217
R1BM1W	4	90.000	0.000
R1BM2W	4	90.000	0.000
R1BU1W	4	83.359	13.283
R1CM1W	4	90.000	0.000

Individual 95% CIs For Mean Based on Pooled StDev



Pooled StDev = 9.522

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00855

Critical value = 2.84

Control = level (CONTROL) of R-1

Level	Lower	Center	Upper
R1AD1W	-24.295	-5.199	13.897
R1AM1W	-14.487	4.609	23.705
R1AU1W	-19.096	0.000	19.096

```
R1BD1W     -19.096     0.000    19.096     (------------*------------)
R1BM1W     -14.487     4.609    23.705        (------------*------------)
R1BM2W     -14.487     4.609    23.705        (------------*------------)
R1BU1W     -21.128    -2.033    17.063    (------------*-----------)
R1CM1W     -14.487     4.609    23.705        (------------*------------)
                                      -------+---------+---------+---------+
                                           -15         0        15        30
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00230

Critical value = 4.76

Intervals for (column level mean) - (row level mean)

	CONTROL	R1AD1W	R1AM1W	R1AU1W	R1BD1W	R1BM1W
R1AD1W	-17.46 27.86					
R1AM1W	-27.27 18.05	-32.47 12.86				
R1AU1W	-22.66 22.66	-27.86 17.46	-18.05 27.27			
R1BD1W	-22.66 22.66	-27.86 17.46	-18.05 27.27	-22.66 22.66		
R1BM1W	-27.27 18.05	-32.47 12.86	-22.66 22.66	-27.27 18.05	-27.27 18.05	
R1BM2W	-27.27	-32.47	-22.66	-27.27	-27.27	-22.66

	18.05	12.86	22.66	18.05	18.05	22.66
R1BU1W	-20.63	-25.83	-16.02	-20.63	-20.63	-16.02
	24.70	19.50	29.30	24.70	24.70	29.30
R1CM1W	-27.27	-32.47	-22.66	-27.27	-27.27	-22.66
	18.05	12.86	22.66	18.05	18.05	22.66

	R1BM2W	R1BU1W
R1BU1W	-16.02	
	29.30	
R1CM1W	-22.66	-29.30
	22.66	16.02

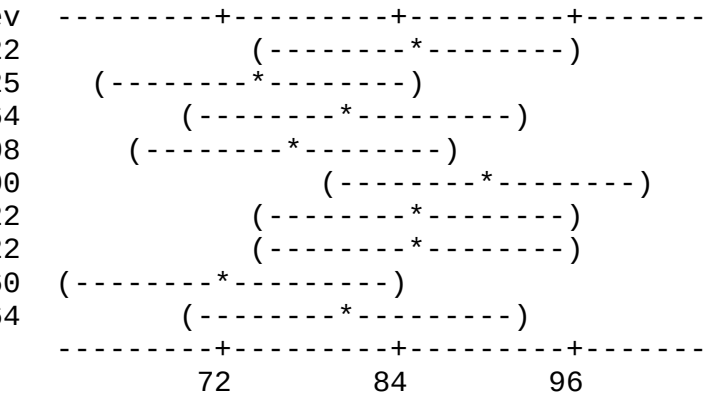
One-way Analysis of Variance

Analysis of Variance for R-2 Chronic Survival

Source	DF	SS	MS	F	P
R-2	8	1093	137	1.17	0.353
Error	27	3155	117		
Total	35	4247			

Level	N	Mean	StDev
CONTROL	4	85.39	9.22
R2AD1W	4	74.14	11.25
R2AM1W	4	80.78	10.64
R2AM2W	4	77.09	16.08
R2AU1W	4	90.00	0.00
R2BD1W	4	85.39	9.22
R2BM1W	4	85.39	9.22
R2BU1W	4	72.48	13.60
R2CM1W	4	80.78	10.64

Individual 95% CIs For Mean
Based on Pooled StDev



Pooled StDev = 10.81

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00855

Critical value = 2.84

Control = level (CONTROL) of R-2

Level	Lower	Center	Upper
R2AD1W	-32.93	-11.25	10.43
R2AM1W	-26.28	-4.61	17.07
R2AM2W	-29.98	-8.30	13.37

```
R2AU1W      -17.07      4.61     26.28          (----------*----------)
R2BD1W      -21.68      0.00     21.68        (----------*----------)
R2BM1W      -21.68      0.00     21.68        (----------*----------)
R2BU1W      -34.59    -12.91      8.76  (----------*---------)
R2CM1W      -26.28     -4.61     17.07      (----------*----------)
                                    --------+---------+---------+---------
                                          -20         0        20
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00230

Critical value = 4.76

Intervals for (column level mean) - (row level mean)

	CONTROL	R2AD1W	R2AM1W	R2AM2W	R2AU1W	R2BD1W
R2AD1W	-14.48 36.98					
R2AM1W	-21.12 30.33	-32.37 19.08				
R2AM2W	-17.42 34.03	-28.67 22.78	-22.03 29.42			
R2AU1W	-30.33 21.12	-41.58 9.87	-34.94 16.51	-38.64 12.81		
R2BD1W	-25.73 25.73	-36.98 14.48	-30.33 21.12	-34.03 17.42	-21.12 30.33	
R2BM1W	-25.73	-36.98	-30.33	-34.03	-21.12	-25.73

	25.73	14.48	21.12	17.42	30.33	25.73
R2BU1W	-12.81	-24.06	-17.42	-21.12	-8.21	-12.81
	38.64	27.39	34.03	30.33	43.25	38.64
R2CM1W	-21.12	-32.37	-25.73	-29.42	-16.51	-21.12
	30.33	19.08	25.73	22.03	34.94	30.33

	R2BM1W	R2BU1W
R2BU1W	-12.81	
	38.64	
R2CM1W	-21.12	-34.03
	30.33	17.42

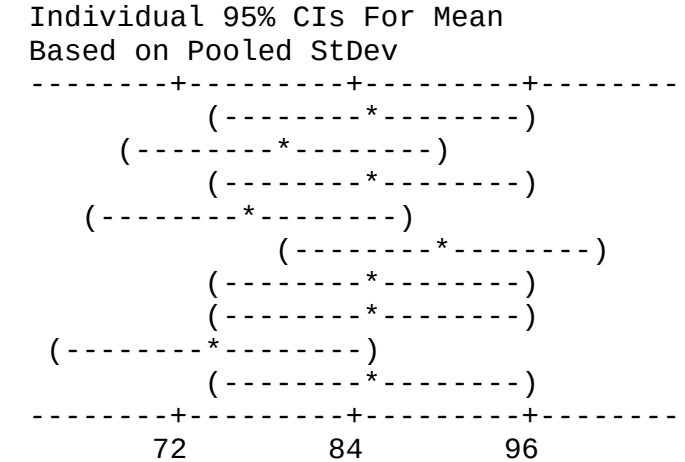
One-way Analysis of Variance

Analysis of Variance for R-2 Acute Survival

Source	DF	SS	MS	F	P
R-2	8	836	105	0.95	0.493
Error	27	2969	110		
Total	35	3805			

Level	N	Mean	StDev
CONTROL	4	85.39	9.22
R2AD1W	4	78.75	13.41
R2AM1W	4	85.39	9.22
R2AM2W	4	77.09	16.08
R2AU1W	4	90.00	0.00
R2BD1W	4	85.39	9.22
R2BM1W	4	85.39	9.22
R2BU1W	4	74.14	11.25
R2CM1W	4	85.39	9.22

Pooled StDev = 10.49



Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00855

Critical value = 2.84

Control = level (CONTROL) of R-2

Level	Lower	Center	Upper
R2AD1W	-27.67	-6.64	14.39
R2AM1W	-21.03	0.00	21.03
R2AM2W	-29.33	-8.30	12.73

```
R2AU1W      -16.42      4.61     25.64           (-----------*-----------)
R2BD1W      -21.03      0.00     21.03        (-----------*-----------)
R2BM1W      -21.03      0.00     21.03        (-----------*-----------)
R2BU1W      -32.28    -11.25      9.78  (-----------*-----------)
R2CM1W      -21.03      0.00     21.03        (-----------*-----------)
                                     -+---------+---------+---------+------
                                   -32       -16         0        16
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00230

Critical value = 4.76

Intervals for (column level mean) - (row level mean)

	CONTROL	R2AD1W	R2AM1W	R2AM2W	R2AU1W	R2BD1W
R2AD1W	-18.32 31.60					
R2AM1W	-24.96 24.96	-31.60 18.32				
R2AM2W	-16.66 33.26	-23.30 26.62	-16.66 33.26			
R2AU1W	-29.57 20.35	-36.21 13.71	-29.57 20.35	-37.87 12.05		
R2BD1W	-24.96 24.96	-31.60 18.32	-24.96 24.96	-33.26 16.66	-20.35 29.57	
R2BM1W	-24.96	-31.60	-24.96	-33.26	-20.35	-24.96

	24.96	18.32	24.96	16.66	29.57	24.96
R2BU1W	-13.71	-20.35	-13.71	-22.01	-9.10	-13.71
	36.21	29.57	36.21	27.91	40.82	36.21
R2CM1W	-24.96	-31.60	-24.96	-33.26	-20.35	-24.96
	24.96	18.32	24.96	16.66	29.57	24.96

	R2BM1W	R2BU1W
R2BU1W	-13.71	
	36.21	
R2CM1W	-24.96	-36.21
	24.96	13.71

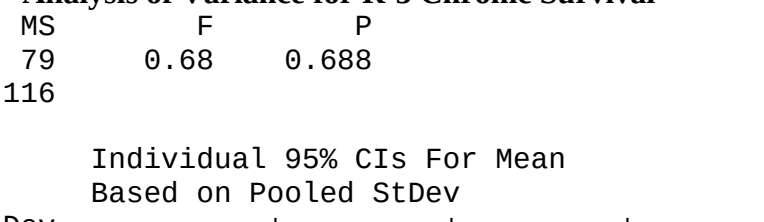
One-way Analysis of Variance

Analysis of Variance for R-3 Chronic Survival

Source	DF	SS	MS	F	P
R-3	7	554	79	0.68	0.688
Error	24	2794	116		
Total	31	3348			

Level	N	Mean	StDev
CONTROL	4	80.78	10.64
R3AD1W	4	85.39	9.22
R3AM1W	4	78.75	13.41
R3AU1W	4	72.11	12.53
R3BD1W	4	80.78	10.64
R3BM1W	4	76.17	9.22
R3BU1W	4	80.78	10.64
R3CM1W	4	85.39	9.22

Individual 95% CIs For Mean Based on Pooled StDev



Pooled StDev = 10.79

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00960

Critical value = 2.81

Control = level (CONTROL) of R-3

Level	Lower	Center	Upper
R3AD1W	-16.86	4.61	26.08
R3AM1W	-23.51	-2.03	19.44
R3AU1W	-30.15	-8.67	12.80
R3BD1W	-21.47	0.00	21.47

```
R3BM1W      -26.08     -4.61     16.86     (-------------*-------------)
R3BU1W      -21.47      0.00     21.47        (-------------*-------------)
R3CM1W      -16.86      4.61     26.08           (-------------*-------------)
                                      -+---------+---------+---------+------
                                     -30       -15         0        15
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00294

Critical value = 4.68

Intervals for (column level mean) - (row level mean)

	CONTROL	R3AD1W	R3AM1W	R3AU1W	R3BD1W	R3BM1W
R3AD1W	-29.86 20.64					
R3AM1W	-23.22 27.28	-18.61 31.89				
R3AU1W	-16.58 33.92	-11.97 38.53	-18.61 31.89			
R3BD1W	-25.25 25.25	-20.64 29.86	-27.28 23.22	-33.92 16.58		
R3BM1W	-20.64 29.86	-16.03 34.47	-22.67 27.83	-29.31 21.18	-20.64 29.86	
R3BU1W	-25.25 25.25	-20.64 29.86	-27.28 23.22	-33.92 16.58	-25.25 25.25	-29.86 20.64

R3CM1W	-29.86 20.64	-25.25 25.25	-31.89 18.61	-38.53 11.97	-29.86 20.64	-34.47 16.03

	R3BU1W
R3CM1W	-29.86 20.64

One-way Analysis of Variance

Analysis of Variance for R-3 Acute Survival

```
Source     DF        SS        MS        F        P
R-3         7     463.0      66.1     0.74    0.640
Error      24    2143.6      89.3
Total      31    2606.6

                                 Individual 95% CIs For Mean
                                 Based on Pooled StDev
Level       N      Mean     StDev  ----+---------+---------+---------+--
CONTROL     4    85.391     9.217           (--------*---------)
R3AD1W      4    85.391     9.217           (--------*---------)
R3AM1W      4    83.359    13.283         (--------*---------)
R3AU1W      4    85.391     9.217           (--------*---------)
R3BD1W      4    85.391     9.217           (--------*---------)
R3BM1W      4    76.174     9.217  (---------*---------)
R3BU1W      4    80.783    10.643       (---------*---------)
R3CM1W      4    90.000     0.000                (---------*---------)
                                 ----+---------+---------+---------+--
Pooled StDev =    9.451             70        80        90       100

Dunnett's intervals for treatment mean minus control mean

    Family error rate = 0.0500
Individual error rate = 0.00960

Critical value = 2.81

Control = level (CONTROL) of R-3

Level        Lower    Center     Upper ---------+---------+---------+--------
R3AD1W     -18.807     0.000    18.807       (------------*------------)
R3AM1W     -20.840    -2.033    16.775     (------------*-----------)
R3AU1W     -18.807     0.000    18.807       (------------*------------)
R3BD1W     -18.807     0.000    18.807       (------------*------------)
```

```
R3BM1W     -28.025    -9.217     9.590 (------------*-----------)
R3BU1W     -23.416    -4.609    14.198    (------------*-----------)
R3CM1W     -14.198     4.609    23.416           (-----------*------------)
                                       ---------+---------+---------+--------
                                              -15         0        15


Tukey's pairwise comparisons

    Family error rate = 0.0500
Individual error rate = 0.00294

Critical value = 4.68

Intervals for (column level mean) - (row level mean)

           CONTROL     R3AD1W      R3AM1W      R3AU1W      R3BD1W      R3BM1W

 R3AD1W       -22.11
               22.11

 R3AM1W       -20.08      -20.08
               24.15       24.15

 R3AU1W       -22.11      -22.11      -24.15
               22.11       22.11       20.08

 R3BD1W       -22.11      -22.11      -24.15      -22.11
               22.11       22.11       20.08       22.11

 R3BM1W       -12.90      -12.90      -14.93      -12.90      -12.90
               31.33       31.33       29.30       31.33       31.33

 R3BU1W       -17.51      -17.51      -19.54      -17.51      -17.51      -26.72
               26.72       26.72       24.69       26.72       26.72       17.51
```

R3CM1W	-26.72 17.51	-26.72 17.51	-28.76 15.47	-26.72 17.51	-26.72 17.51	-35.94 8.29

	R3BU1W
R3CM1W	-31.33 12.90

One-way Analysis of Variance

Analysis of Variance for R-4 Chronic Survival

Source	DF	SS	MS	F	P
R-4	8	2222	278	1.42	0.235
Error	27	5293	196		
Total	35	7515			

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
CONTROL	4	85.39	9.22	(--------*--------)
R4AD1W	4	62.30	8.59	(--------*--------)
R4AM1W	4	83.36	13.28	(--------*--------)
R4AU1W	4	78.75	13.41	(--------*--------)
R4BD1W	4	83.36	13.28	(--------*--------)
R4BM1W	4	83.36	13.28	(--------*--------)
R4BU1W	4	90.00	0.00	(--------*--------)
R4CM1W	4	71.19	26.77	(-------*--------)
R4CM2W	4	78.75	13.41	(--------*--------)
Pooled StDev =		14.00		48 64 80 96

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00855

Critical value = 2.84

Control = level (CONTROL) of R-4

Level	Lower	Center	Upper	(----------*----------)
R4AD1W	-51.17	-23.09	4.99	(----------*----------)
R4AM1W	-30.11	-2.03	26.04	(----------*----------)
R4AU1W	-34.72	-6.64	21.44	(----------*----------)

```
R4BD1W      -30.11     -2.03     26.04          (----------*----------)
R4BM1W      -30.11     -2.03     26.04          (----------*----------)
R4BU1W      -23.47      4.61     32.69             (----------*----------)
R4CM1W      -42.27    -14.20     13.88     (----------*-----------)
R4CM2W      -34.72     -6.64     21.44        (----------*-----------)
                                      -+---------+---------+---------+------
                                    -50       -25         0        25
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00230

Critical value = 4.76

Intervals for (column level mean) - (row level mean)

	CONTROL	R4AD1W	R4AM1W	R4AU1W	R4BD1W	R4BM1W
R4AD1W	-10.23 56.41					
R4AM1W	-31.29 35.36	-54.38 12.26				
R4AU1W	-26.68 39.96	-49.77 16.87	-28.71 37.93			
R4BD1W	-31.29 35.36	-54.38 12.26	-33.32 33.32	-37.93 28.71		
R4BM1W	-31.29 35.36	-54.38 12.26	-33.32 33.32	-37.93 28.71	-33.32 33.32	
R4BU1W	-37.93	-61.02	-39.96	-44.57	-39.96	-39.96

	28.71	5.62	26.68	22.07	26.68	26.68
R4CM1W	-19.13	-42.22	-21.16	-25.77	-21.16	-21.16
	47.52	24.43	45.49	40.88	45.49	45.49
R4CM2W	-26.68	-49.77	-28.71	-33.32	-28.71	-28.71
	39.96	16.87	37.93	33.32	37.93	37.93

	R4BU1W	R4CM1W
R4CM1W	-14.52	
	52.13	
R4CM2W	-22.07	-40.88
	44.57	25.77

One-way Analysis of Variance

Analysis of Variance for R-4 Acute Survival

Source	DF	SS	MS	F	P
R-4	8	1970	246	1.78	0.125
Error	27	3736	138		
Total	35	5706			

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
CONTROL	4	85.39	9.22	(-------*-------)
R4AD1W	4	64.33	9.82	(-------*-------)
R4AM1W	4	85.39	9.22	(-------*-------)
R4AU1W	4	78.75	13.41	(--------*-------)
R4BD1W	4	83.36	13.28	(-------*-------)
R4BM1W	4	85.39	9.22	(-------*-------)
R4BU1W	4	90.00	0.00	(-------*-------)

```
R4CM1W      4     74.14     21.28         (-------*-------)
R4CM2W      4     85.39      9.22                 (-------*-------)
                                  ------+---------+---------+---------+
Pooled StDev =    11.76                60        75        90       105

Dunnett's intervals for treatment mean minus control mean

    Family error rate = 0.0500
Individual error rate = 0.00855

Critical value = 2.84

Control = level (CONTROL) of R-4

Level        Lower    Center     Upper ---+---------+---------+---------+----
R4AD1W     -44.65    -21.06      2.53  (----------*----------)
R4AM1W     -23.59      0.00     23.59            (----------*----------)
R4AU1W     -30.23     -6.64     16.95         (----------*----------)
R4BD1W     -25.62     -2.03     21.56           (----------*----------)
R4BM1W     -23.59      0.00     23.59            (----------*----------)
R4BU1W     -18.98      4.61     28.20               (----------*----------)
R4CM1W     -34.84    -11.25     12.34       (----------*----------)
R4CM2W     -23.59      0.00     23.59            (----------*----------)
                                  ---+---------+---------+---------+----
                                    -40       -20         0        20


Tukey's pairwise comparisons

    Family error rate = 0.0500
Individual error rate = 0.00230

Critical value = 4.76

Intervals for (column level mean) - (row level mean)
```

	CONTROL	R4AD1W	R4AM1W	R4AU1W	R4BD1W	R4BM1W
R4AD1W	-6.94 49.06					
R4AM1W	-28.00 28.00	-49.06 6.94				
R4AU1W	-21.36 34.64	-42.41 13.58	-21.36 34.64			
R4BD1W	-25.97 30.03	-47.02 8.97	-25.97 30.03	-32.61 23.39		
R4BM1W	-28.00 28.00	-49.06 6.94	-28.00 28.00	-34.64 21.36	-30.03 25.97	
R4BU1W	-32.61 23.39	-53.66 2.33	-32.61 23.39	-39.25 16.75	-34.64 21.36	-32.61 23.39
R4CM1W	-16.75 39.25	-37.81 18.19	-16.75 39.25	-23.39 32.61	-18.78 37.22	-16.75 39.25
R4CM2W	-28.00 28.00	-49.06 6.94	-28.00 28.00	-34.64 21.36	-30.03 25.97	-28.00 28.00

	R4BU1W	R4CM1W
R4CM1W	-12.14 43.86	
R4CM2W	-23.39 32.61	-39.25 16.75

One-way Analysis of Variance

Analysis of Variance for R-5 Chronic Survival

Source	DF	SS	MS	F	P
R-5	9	1052	117	0.73	0.678
Error	29	4644	160		
Total	38	5696			

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
CONTROL	4	85.39	9.22	(----------*----------)
R5AD1W	3	75.00	13.61	(-----------*-----------)
R5AM1W	4	72.11	12.53	(----------*----------)
R5AN1W	4	85.39	9.22	(----------*----------)
R5AU1W	4	90.00	0.00	(----------*----------)
R5BD1W	4	78.75	13.41	(----------*---------)
R5BM1W	4	80.78	10.64	(---------*----------)
R5BN1W	4	75.58	18.69	(----------*----------)
R5BU1W	4	78.75	13.41	(----------*---------)
R5CM1W	4	81.70	16.61	(----------*----------)
Pooled StDev =		12.66		60 72 84 96

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00767

Critical value = 2.87

Control = level (CONTROL) of R-5

Level	Lower	Center	Upper	----------+---------+---------+-------
R5AD1W	-38.09	-10.39	17.30	(-------------*-------------)
R5AM1W	-38.92	-13.28	12.36	(-----------*-----------)

```
R5AN1W      -25.64      0.00     25.64        (-----------*-----------)
R5AU1W      -21.03      4.61     30.25          (-----------*-----------)
R5BD1W      -32.28     -6.64     19.00     (-----------*-----------)
R5BM1W      -30.25     -4.61     21.03      (-----------*-----------)
R5BN1W      -35.45     -9.81     15.83   (-----------*-----------)
R5BU1W      -32.28     -6.64     19.00     (-----------*-----------)
R5CM1W      -29.34     -3.69     21.95      (-----------*-----------)
                                        ----------+---------+---------+-------
                                                -20         0        20
```

Tukey's pairwise comparisons

```
    Family error rate = 0.0500
Individual error rate = 0.00187

Critical value = 4.84
```

Intervals for (column level mean) - (row level mean)

	CONTROL	R5AD1W	R5AM1W	R5AN1W	R5AU1W	R5BD1W
R5AD1W	-22.69 43.47					
R5AM1W	-17.34 43.91	-30.19 35.97				
R5AN1W	-30.63 30.63	-43.47 22.69	-43.91 17.34			
R5AU1W	-35.23 26.02	-48.08 18.08	-48.52 12.73	-35.23 26.02		
R5BD1W	-23.98 37.27	-36.83 29.33	-37.27 23.98	-23.98 37.27	-19.38 41.88	

R5BM1W	-26.02	-38.86	-39.30	-26.02	-21.41	-32.66
	35.23	27.30	21.95	35.23	39.84	28.59
R5BN1W	-20.82	-33.66	-34.10	-20.82	-16.21	-27.46
	40.43	32.50	27.15	40.43	45.04	33.79
R5BU1W	-23.98	-36.83	-37.27	-23.98	-19.38	-30.63
	37.27	29.33	23.98	37.27	41.88	30.63
R5CM1W	-26.93	-39.78	-40.21	-26.93	-22.32	-33.57
	34.32	26.38	21.04	34.32	38.93	27.68

	R5BM1W	R5BN1W	R5BU1W
R5BN1W	-25.43		
	35.82		
R5BU1W	-28.59	-33.79	
	32.66	27.46	
R5CM1W	-31.54	-36.74	-33.57
	29.71	24.51	27.68

One-way Analysis of Variance

Analysis of Variance for R-5 Acute Survival

Source	DF	SS	MS	F	P
R-5	9	1090	121	0.93	0.512
Error	30	3898	130		
Total	39	4988			

Individual 95% CIs For Mean
Based on Pooled StDev

```
Level       N      Mean     StDev  --------+---------+---------+--------
CONTROL     4     90.00      0.00              (---------*---------)
R5AD1W      4     80.78     10.64        (--------*---------)
R5AM1W      4     74.14     11.25  (---------*--------)
R5AN1W      4     85.39      9.22           (---------*---------)
R5AU1W      4     90.00      0.00              (---------*---------)
R5BD1W      4     85.39      9.22           (---------*---------)
R5BM1W      4     85.39      9.22           (---------*---------)
R5BN1W      4     75.58     18.69   (---------*---------)
R5BU1W      4     78.75     13.41      (---------*--------)
R5CM1W      4     81.70     16.61        (---------*---------)
                               --------+---------+---------+--------
Pooled StDev =    11.40                 72        84        96

Dunnett's intervals for treatment mean minus control mean

    Family error rate = 0.0500
Individual error rate = 0.00772

Critical value = 2.86

Control = level (CONTROL) of R-5

Level        Lower    Center     Upper ----------+---------+---------+-------
R5AD1W      -32.23     -9.22     13.80     (----------*----------)
R5AM1W      -38.88    -15.86      7.16  (----------*----------)
R5AN1W      -27.63     -4.61     18.41       (----------*----------)
R5AU1W      -23.02      0.00     23.02         (----------*----------)
R5BD1W      -27.63     -4.61     18.41       (----------*----------)
R5BM1W      -27.63     -4.61     18.41       (----------*----------)
R5BN1W      -37.43    -14.42      8.60  (----------*----------)
R5BU1W      -34.27    -11.25     11.77    (----------*----------)
R5CM1W      -31.32     -8.30     14.71     (----------*----------)
                                    ----------+---------+---------+-------
                                            -20         0        20
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00188

Critical value = 4.82

Intervals for (column level mean) - (row level mean)

	CONTROL	R5AD1W	R5AM1W	R5AN1W	R5AU1W	R5BD1W
R5AD1W	-18.25 36.69					
R5AM1W	-11.61 43.33	-20.83 34.11				
R5AN1W	-22.86 32.08	-32.08 22.86	-38.72 16.22			
R5AU1W	-27.47 27.47	-36.69 18.25	-43.33 11.61	-32.08 22.86		
R5BD1W	-22.86 32.08	-32.08 22.86	-38.72 16.22	-27.47 27.47	-22.86 32.08	
R5BM1W	-22.86 32.08	-32.08 22.86	-38.72 16.22	-27.47 27.47	-22.86 32.08	-27.47 27.47
R5BN1W	-13.05 41.89	-22.27 32.67	-28.91 26.03	-17.66 37.28	-13.05 41.89	-17.66 37.28
R5BU1W	-16.22 38.72	-25.44 29.50	-32.08 22.86	-20.83 34.11	-16.22 38.72	-20.83 34.11

R5CM1W	-19.17 35.77	-28.39 26.56	-35.03 19.92	-23.78 31.17	-19.17 35.77	-23.78 31.17

	R5BM1W	R5BN1W	R5BU1W
R5BN1W	-17.66 37.28		
R5BU1W	-20.83 34.11	-30.64 24.30	
R5CM1W	-23.78 31.17	-33.59 21.36	-30.42 24.52

One-way Analysis of Variance

Analysis of Variance for R-6 Chronic Survival

Source	DF	SS	MS	F	P
R-6	7	480	69	0.37	0.909
Error	24	4406	184		
Total	31	4886			

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
CONTROL	4	77.09	16.08	(----------*----------)
R6AD1W	4	85.39	9.22	(----------*----------)
R6AM1W	4	81.70	16.61	(----------*----------)
R6AM2W	4	85.39	9.22	(----------*----------)
R6AU1W	4	80.78	10.64	(----------*----------)
R6BM1W	4	74.14	21.28	(----------*----------)
R6BU1W	4	85.39	9.22	(----------*----------)
R6CM1W	4	80.78	10.64	(----------*----------)

Pooled StDev = 13.55 — 72 — 84 — 96

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00960

Critical value = 2.81

Control = level (CONTROL) of R-6

Level	Lower	Center	Upper	
R6AD1W	-18.66	8.30	35.27	(----------*----------)
R6AM1W	-22.36	4.61	31.57	(----------*----------)
R6AM2W	-18.66	8.30	35.27	(----------*----------)
R6AU1W	-23.27	3.69	30.66	(----------*----------)

```
R6BM1W      -29.91     -2.95     24.02 (-------------*------------)
R6BU1W      -18.66      8.30     35.27       (------------*-------------)
R6CM1W      -23.27      3.69     30.66    (-------------*------------)
                                      -----+---------+---------+---------+--
                                         -20         0        20        40
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00294

Critical value = 4.68

Intervals for (column level mean) - (row level mean)

	CONTROL	R6AD1W	R6AM1W	R6AM2W	R6AU1W	R6BM1W
R6AD1W	-40.01 23.40					
R6AM1W	-36.32 27.10	-28.01 35.40				
R6AM2W	-40.01 23.40	-31.71 31.71	-35.40 28.01			
R6AU1W	-35.40 28.01	-27.10 36.32	-30.79 32.62	-27.10 36.32		
R6BM1W	-28.76 34.65	-20.46 42.96	-24.15 39.26	-20.46 42.96	-25.07 38.35	
R6BU1W	-40.01 23.40	-31.71 31.71	-35.40 28.01	-31.71 31.71	-36.32 27.10	-42.96 20.46

R6CM1W	-35.40	-27.10	-30.79	-27.10	-31.71	-38.35
	28.01	36.32	32.62	36.32	31.71	25.07

	R6BU1W
R6CM1W	-27.10
	36.32

One-way Analysis of Variance

Analysis of Variance for R-6 Acute Survival

Source	DF	SS	MS	F	P
R-6	7	282	40	0.29	0.953
Error	24	3373	141		
Total	31	3655			

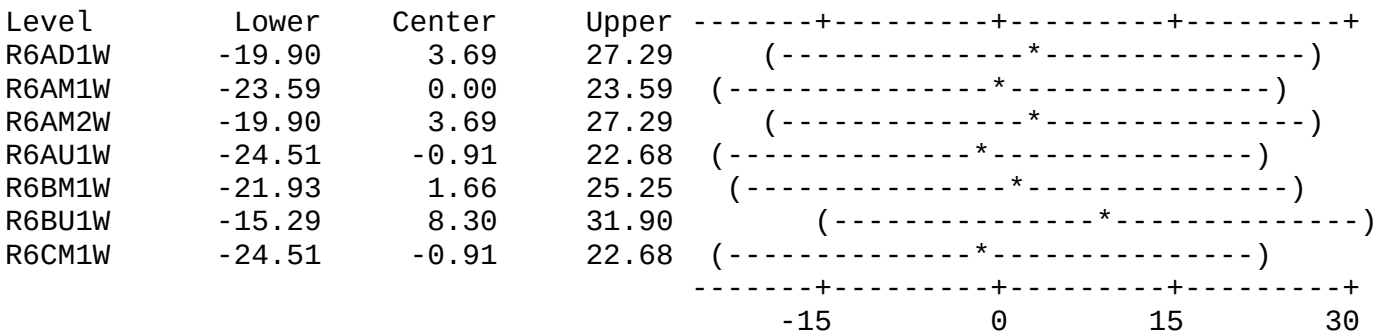
Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
CONTROL	4	81.70	16.61	(----------*----------)
R6AD1W	4	85.39	9.22	(----------*----------)
R6AM1W	4	81.70	16.61	(----------*----------)
R6AM2W	4	85.39	9.22	(----------*----------)
R6AU1W	4	80.78	10.64	(----------*----------)
R6BM1W	4	83.36	13.28	(----------*----------)
R6BU1W	4	90.00	0.00	(----------*----------)
R6CM1W	4	80.78	10.64	(----------*----------)
Pooled StDev =		11.86		--+---------+---------+---------+---- 70 80 90 100

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00960

Critical value = 2.81

Control = level (CONTROL) of R-6



Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00294

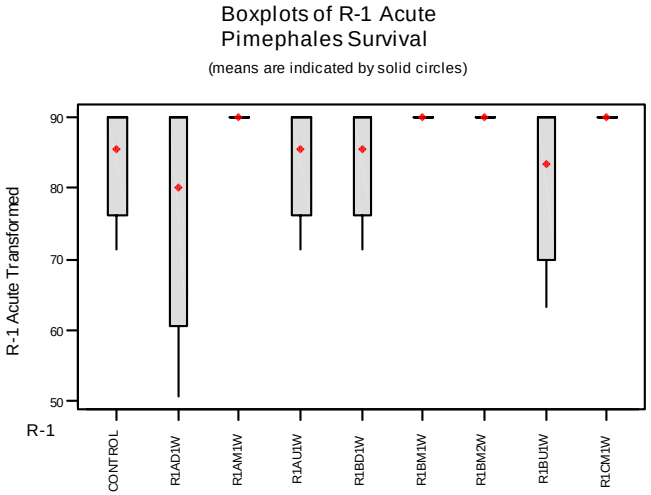
Critical value = 4.68

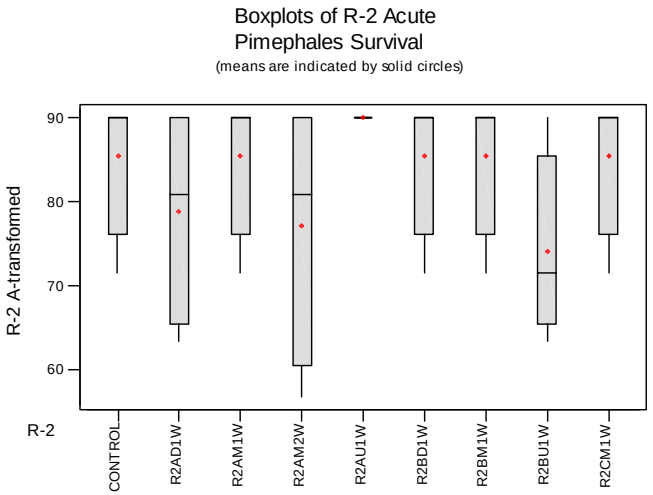
Intervals for (column level mean) - (row level mean)

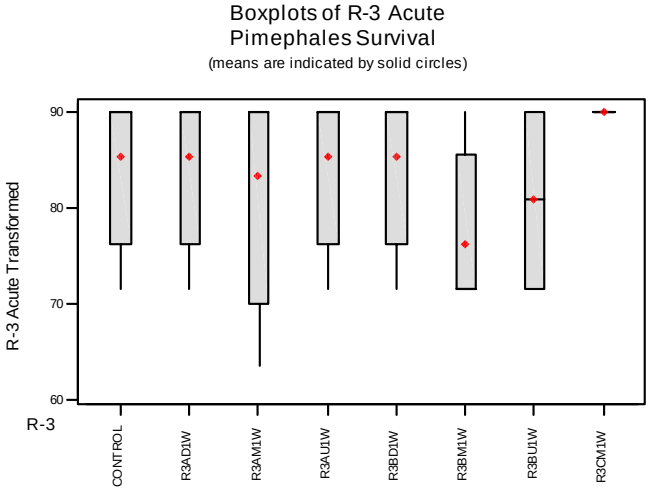
	CONTROL	R6AD1W	R6AM1W	R6AM2W	R6AU1W	R6BM1W
R6AD1W	-31.44 24.05					
R6AM1W	-27.74 27.74	-24.05 31.44				
R6AM2W	-31.44 24.05	-27.74 27.74	-31.44 24.05			

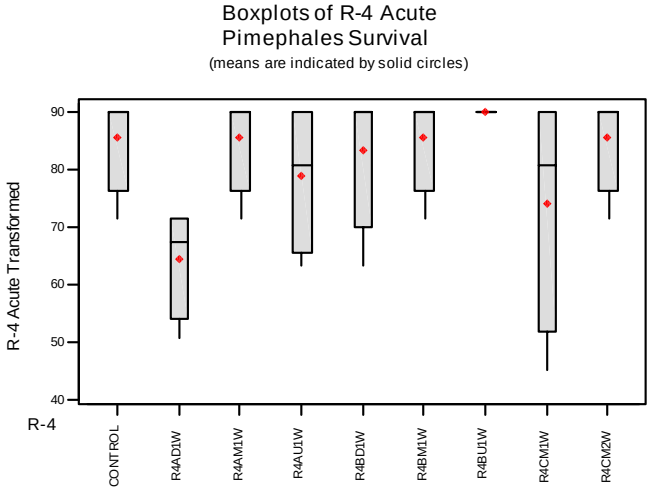
R6AU1W	-26.83	-23.13	-26.83	-23.13		
	28.66	32.35	28.66	32.35		
R6BM1W	-29.40	-25.71	-29.40	-25.71	-30.32	
	26.08	29.77	26.08	29.77	25.17	
R6BU1W	-36.04	-32.35	-36.04	-32.35	-36.96	-34.38
	19.44	23.13	19.44	23.13	18.52	21.10
R6CM1W	-26.83	-23.13	-26.83	-23.13	-27.74	-25.17
	28.66	32.35	28.66	32.35	27.74	30.32

	R6BU1W
R6CM1W	-18.52
	36.96

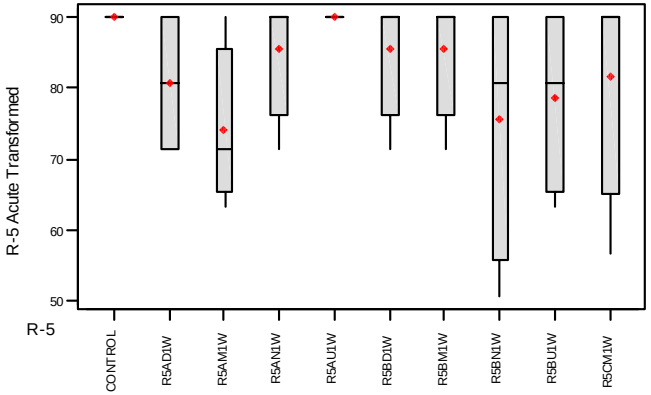

Boxplots of R-1 Acute Pimephales Survival
(means are indicated by solid circles)
R-1 Acute Transformed
90
80
70
60
50
R-1
CONTROL
R1AD1W
R1AM1W
R1AU1W
R1BD1W
R1BM1W
R1BM2W
R1BU1W
R1CM1W


Boxplots of R-2 Acute Pimephales Survival
(means are indicated by solid circles)
R-2 A-transformed
90
80
70
60
R-2
CONTROL
R2AD1W
R2AM1W
R2AM2W
R2AU1W
R2BD1W
R2BM1W
R2BU1W
R2CM1W

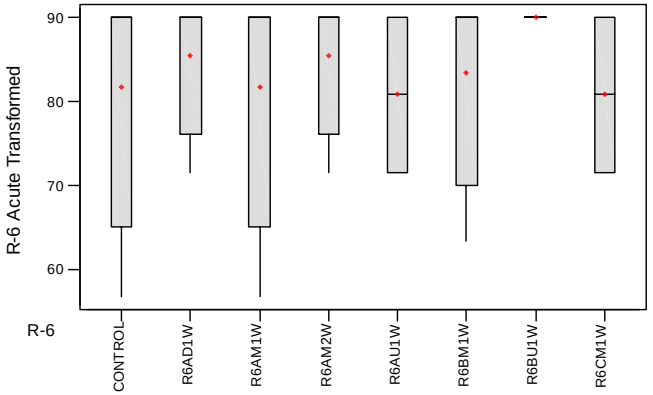

Boxplots of R-3 Acute Pimephales Survival
(means are indicated by solid circles)
R-3 Acute Transformed
90
80
70
60
R-3
CONTROL
R3AD1W
R3AM1W
R3AU1W
R3BD1W
R3BM1W
R3BU1W
R3CM1W


Boxplots of R-4 Acute Pimephales Survival
(means are indicated by solid circles)
R-4 Acute Transformed
90
80
70
60
50
40
R-4
CONTROL
R4AD1W
R4AM1W
R4AU1W
R4BD1W
R4BM1W
R4BU1W
R4CM1W
R4CM2W

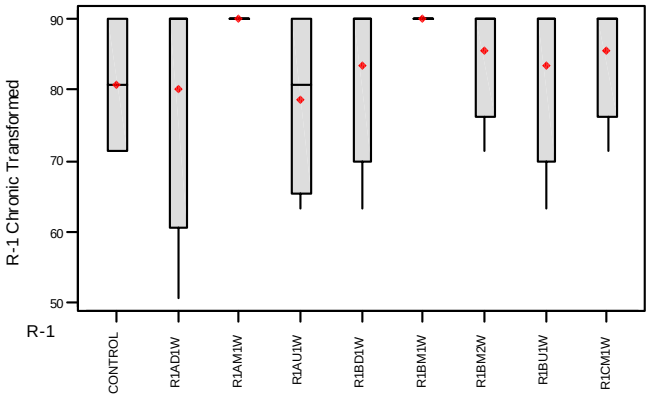
Boxplots of R-5 Acute Pimephales Survival
(means are indicated by solid circles)



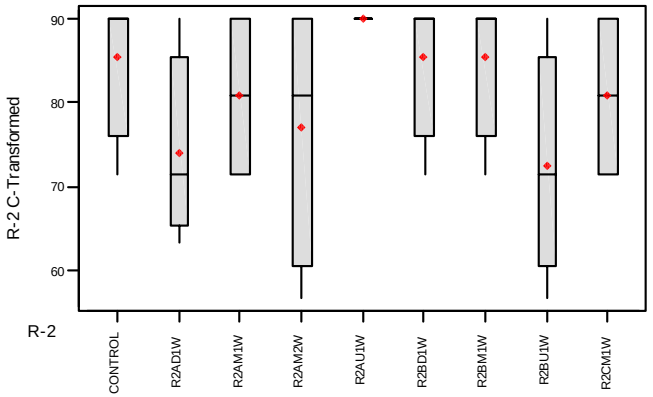
Boxplots of R-6 Acute Pimephales Survival
(means are indicated by solid circles)



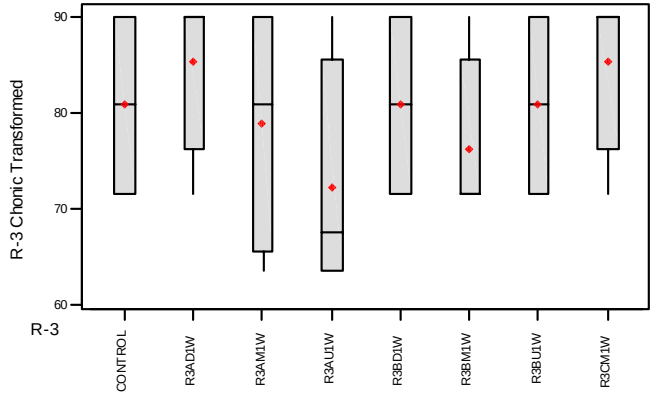
Boxplots of R-1 Chronic Pimephales Survival
(means are indicated by solid circles)



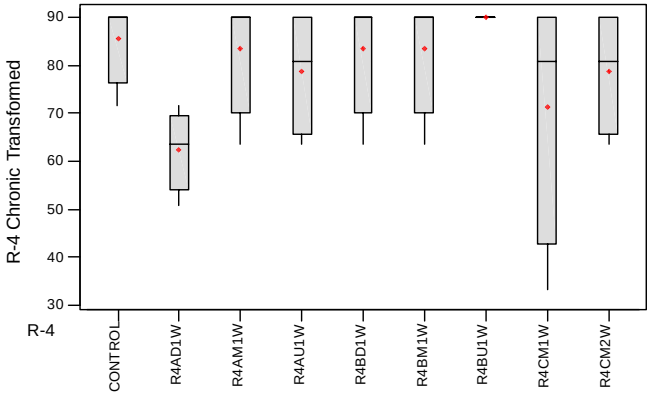
Boxplots of R-2 Chronic Pimephales Survival
(means are indicated by solid circles)



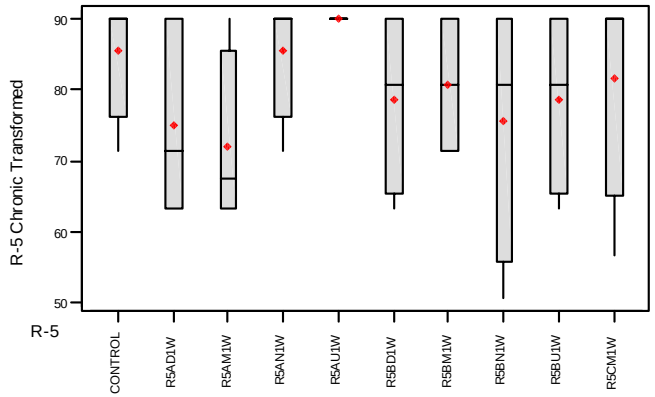
Boxplots of R-3 Chronic
Pimephales Survival
(means are indicated by solid circles)



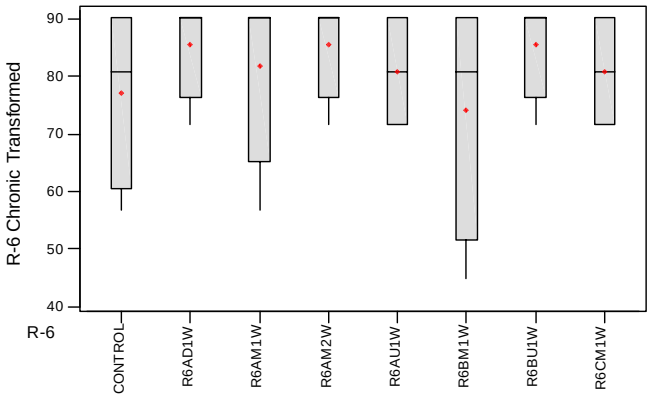
Boxplots of R-4 Chronic
Pimephales Survival
(means are indicated by solid circles)



Boxplots of R-5 Chronic
Pimephales Survival
(means are indicated by solid circles)



Boxplots of R-6 Chronic
Pimephales Survival
(means are indicated by solid circles)



******PIMEPHALES GROWTH*********

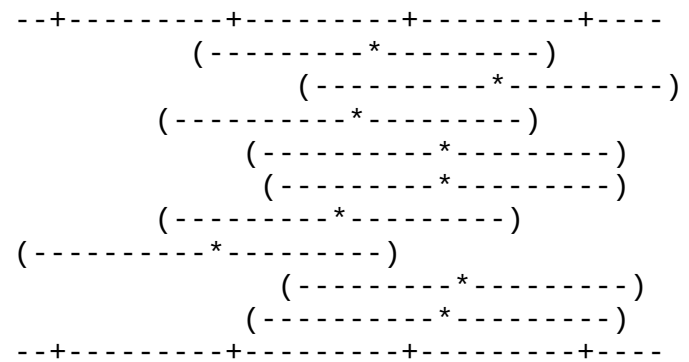
One-way Analysis of Variance

Analysis of Variance for R-1 Weig

Source	DF	SS	MS	F	P
R-1	8	0.01942	0.00243	0.95	0.494
Error	27	0.06907	0.00256		
Total	35	0.08850			

Level	N	Mean	StDev
CONTROL	4	0.34000	0.02582
R1AD1W	4	0.37250	0.10595
R1AM1W	4	0.33250	0.02986
R1AU1W	4	0.35750	0.06292
R1BD1W	4	0.36000	0.03266
R1BM1W	4	0.33000	0.04761
R1BM2W	4	0.29250	0.01708
R1BU1W	4	0.36500	0.04655
R1CM1W	4	0.35750	0.02217

Individual 95% CIs For Mean
Based on Pooled StDev



Pooled StDev = 0.05058

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00855

Critical value = 2.84

Control = level (CONTROL) of R-1

Level	Lower	Center	Upper

```
R1AD1W    -0.06893   0.03250   0.13393           (------------*------------)
R1AM1W    -0.10893  -0.00750   0.09393      (------------*------------)
R1AU1W    -0.08393   0.01750   0.11893          (------------*------------)
R1BD1W    -0.08143   0.02000   0.12143          (------------*------------)
R1BM1W    -0.11143  -0.01000   0.09143      (------------*------------)
R1BM2W    -0.14893  -0.04750   0.05393 (------------*------------)
R1BU1W    -0.07643   0.02500   0.12643          (------------*------------)
R1CM1W    -0.08393   0.01750   0.11893          (------------*------------)
                                       ---------+---------+---------+--------
                                             -0.080     0.000     0.080
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00230

Critical value = 4.76

Intervals for (column level mean) - (row level mean)

	CONTROL	R1AD1W	R1AM1W	R1AU1W	R1BD1W	R1BM1W
R1AD1W	-0.15288 0.08788					
R1AM1W	-0.11288 0.12788	-0.08038 0.16038				
R1AU1W	-0.13788 0.10288	-0.10538 0.13538	-0.14538 0.09538			
R1BD1W	-0.14038 0.10038	-0.10788 0.13288	-0.14788 0.09288	-0.12288 0.11788		
R1BM1W	-0.11038	-0.07788	-0.11788	-0.09288	-0.09038	

	0.13038	0.16288	0.12288	0.14788	0.15038	
R1BM2W	-0.07288	-0.04038	-0.08038	-0.05538	-0.05288	-0.08288
	0.16788	0.20038	0.16038	0.18538	0.18788	0.15788
R1BU1W	-0.14538	-0.11288	-0.15288	-0.12788	-0.12538	-0.15538
	0.09538	0.12788	0.08788	0.11288	0.11538	0.08538
R1CM1W	-0.13788	-0.10538	-0.14538	-0.12038	-0.11788	-0.14788
	0.10288	0.13538	0.09538	0.12038	0.12288	0.09288

	R1BM2W	R1BU1W
R1BU1W	-0.19288	
	0.04788	
R1CM1W	-0.18538	-0.11288
	0.05538	0.12788

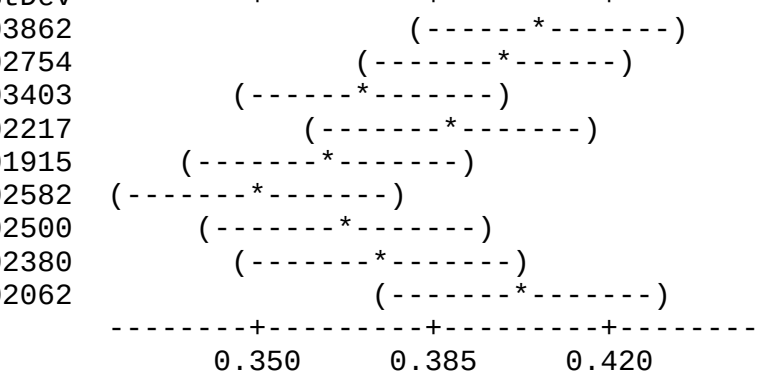
One-way Analysis of Variance

Analysis of Variance for R-2 Weig

Source	DF	SS	MS	F	P
R-2	8	0.011939	0.001492	2.05	0.078
Error	27	0.019650	0.000728		
Total	35	0.031589			

Level	N	Mean	StDev
CONTROL	4	0.40750	0.03862
R2AD1W	4	0.39750	0.02754
R2AM1W	4	0.37250	0.03403
R2AM2W	4	0.38750	0.02217
R2AU1W	4	0.36500	0.01915
R2BD1W	4	0.35000	0.02582
R2BM1W	4	0.36750	0.02500
R2BU1W	4	0.37500	0.02380
R2CM1W	4	0.40250	0.02062

Individual 95% CIs For Mean
Based on Pooled StDev



Pooled StDev = 0.02698

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00855

Critical value = 2.84

Control = level (CONTROL) of R-2

Level	Lower	Center	Upper
R2AD1W	-0.06410	-0.01000	0.04410
R2AM1W	-0.08910	-0.03500	0.01910
R2AM2W	-0.07410	-0.02000	0.03410

```
R2AU1W    -0.09660  -0.04250   0.01160     (----------*---------)
R2BD1W    -0.11160  -0.05750  -0.00340  (----------*---------)
R2BM1W    -0.09410  -0.04000   0.01410     (----------*----------)
R2BU1W    -0.08660  -0.03250   0.02160       (---------*----------)
R2CM1W    -0.05910  -0.00500   0.04910           (----------*----------)
                                       ---+---------+---------+---------+----
                                       -0.100    -0.050    -0.000     0.050
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00230

Critical value = 4.76

Intervals for (column level mean) - (row level mean)

	CONTROL	R2AD1W	R2AM1W	R2AM2W	R2AU1W	R2BD1W
R2AD1W	-0.05421 0.07421					
R2AM1W	-0.02921 0.09921	-0.03921 0.08921				
R2AM2W	-0.04421 0.08421	-0.05421 0.07421	-0.07921 0.04921			
R2AU1W	-0.02171 0.10671	-0.03171 0.09671	-0.05671 0.07171	-0.04171 0.08671		
R2BD1W	-0.00671 0.12171	-0.01671 0.11171	-0.04171 0.08671	-0.02671 0.10171	-0.04921 0.07921	
R2BM1W	-0.02421	-0.03421	-0.05921	-0.04421	-0.06671	-0.08171

	0.10421	0.09421	0.06921	0.08421	0.06171	0.04671
R2BU1W	-0.03171	-0.04171	-0.06671	-0.05171	-0.07421	-0.08921
	0.09671	0.08671	0.06171	0.07671	0.05421	0.03921
R2CM1W	-0.05921	-0.06921	-0.09421	-0.07921	-0.10171	-0.11671
	0.06921	0.05921	0.03421	0.04921	0.02671	0.01171

	R2BM1W	R2BU1W
R2BU1W	-0.07171	
	0.05671	
R2CM1W	-0.09921	-0.09171
	0.02921	0.03671

One-way Analysis of Variance

Analysis of Variance for R-3 Weig

Source	DF	SS	MS	F	P
R-3	7	0.024400	0.003486	6.27	0.000
Error	24	0.013350	0.000556		
Total	31	0.037750			

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
CONTROL	4	0.31000	0.01155	(------*------)
R3AD1W	4	0.31750	0.02217	(------*------)
R3AM1W	4	0.38500	0.03000	(------*------)
R3AU1W	4	0.32000	0.02000	(------*------)
R3BD1W	4	0.31000	0.02160	(------*------)
R3BM1W	4	0.37500	0.02082	(------*------)
R3BU1W	4	0.32000	0.01826	(------*------)
R3CM1W	4	0.33250	0.03594	(------*------)

Pooled StDev = 0.02358 — 0.315 — 0.350 — 0.385

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00960

Critical value = 2.81

Control = level (CONTROL) of R-3

Level	Lower	Center	Upper	(---------*---------)
R3AD1W	-0.03943	0.00750	0.05443	(---------*---------)
R3AM1W	0.02807	0.07500	0.12193	(---------*---------)
R3AU1W	-0.03693	0.01000	0.05693	(---------*---------)
R3BD1W	-0.04693	0.00000	0.04693	(---------*---------)

```
R3BM1W     0.01807   0.06500   0.11193               (--------*--------)
R3BU1W    -0.03693   0.01000   0.05693     (--------*--------)
R3CM1W    -0.02443   0.02250   0.06943       (--------*---------)
                                     ----------+---------+---------+-------
                                             0.000     0.050     0.100
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00294

Critical value = 4.68

Intervals for (column level mean) - (row level mean)

	CONTROL	R3AD1W	R3AM1W	R3AU1W	R3BD1W	R3BM1W
R3AD1W	-0.06269 0.04769					
R3AM1W	-0.13019 -0.01981	-0.12269 -0.01231				
R3AU1W	-0.06519 0.04519	-0.05769 0.05269	0.00981 0.12019			
R3BD1W	-0.05519 0.05519	-0.04769 0.06269	0.01981 0.13019	-0.04519 0.06519		
R3BM1W	-0.12019 -0.00981	-0.11269 -0.00231	-0.04519 0.06519	-0.11019 0.00019	-0.12019 -0.00981	
R3BU1W	-0.06519 0.04519	-0.05769 0.05269	0.00981 0.12019	-0.05519 0.05519	-0.06519 0.04519	-0.00019 0.11019

R3CM1W	-0.07769	-0.07019	-0.00269	-0.06769	-0.07769	-0.01269
	0.03269	0.04019	0.10769	0.04269	0.03269	0.09769

	R3BU1W
R3CM1W	-0.06769
	0.04269

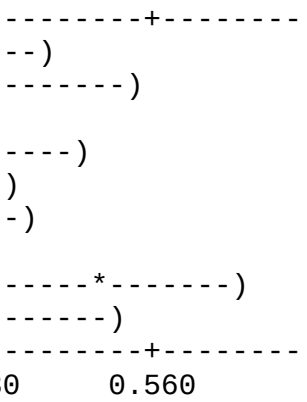
One-way Analysis of Variance

Analysis of Variance for R-4 Weig

Source	DF	SS	MS	F	P
R-4	8	0.04750	0.00594	1.28	0.293
Error	27	0.12498	0.00463		
Total	35	0.17247			

Level	N	Mean	StDev
CONTROL	4	0.44250	0.02062
R4AD1W	4	0.48500	0.04123
R4AM1W	4	0.41250	0.03862
R4AU1W	4	0.46000	0.06272
R4BD1W	4	0.42250	0.02630
R4BM1W	4	0.43750	0.02986
R4BU1W	4	0.42000	0.02160
R4CM1W	4	0.53250	0.17173
R4CM2W	4	0.47500	0.05066

Individual 95% CIs For Mean
Based on Pooled StDev



Pooled StDev = 0.06803

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00855

Critical value = 2.84

Control = level (CONTROL) of R-4

Level	Lower	Center	Upper
R4AD1W	-0.09393	0.04250	0.17893
R4AM1W	-0.16643	-0.03000	0.10643

```
R4AU1W    -0.11893   0.01750   0.15393     (----------*----------)
R4BD1W    -0.15643  -0.02000   0.11643  (----------*----------)
R4BM1W    -0.14143  -0.00500   0.13143   (-----------*----------)
R4BU1W    -0.15893  -0.02250   0.11393  (----------*----------)
R4CM1W    -0.04643   0.09000   0.22643           (----------*----------)
R4CM2W    -0.10393   0.03250   0.16893      (-----------*----------)
                                       ----+---------+---------+---------+---
                                        -0.12      0.00      0.12      0.24
```

Tukey's pairwise comparisons

```
    Family error rate = 0.0500
Individual error rate = 0.00230

Critical value = 4.76
```

Intervals for (column level mean) - (row level mean)

	CONTROL	R4AD1W	R4AM1W	R4AU1W	R4BD1W	R4BM1W
R4AD1W	-0.20442 0.11942					
R4AM1W	-0.13192 0.19192	-0.08942 0.23442				
R4AU1W	-0.17942 0.14442	-0.13692 0.18692	-0.20942 0.11442			
R4BD1W	-0.14192 0.18192	-0.09942 0.22442	-0.17192 0.15192	-0.12442 0.19942		
R4BM1W	-0.15692 0.16692	-0.11442 0.20942	-0.18692 0.13692	-0.13942 0.18442	-0.17692 0.14692	

R4BU1W	-0.13942	-0.09692	-0.16942	-0.12192	-0.15942	-0.14442
	0.18442	0.22692	0.15442	0.20192	0.16442	0.17942
R4CM1W	-0.25192	-0.20942	-0.28192	-0.23442	-0.27192	-0.25692
	0.07192	0.11442	0.04192	0.08942	0.05192	0.06692
R4CM2W	-0.19442	-0.15192	-0.22442	-0.17692	-0.21442	-0.19942
	0.12942	0.17192	0.09942	0.14692	0.10942	0.12442

	R4BU1W	R4CM1W
R4CM1W	-0.27442	
	0.04942	
R4CM2W	-0.21692	-0.10442
	0.10692	0.21942

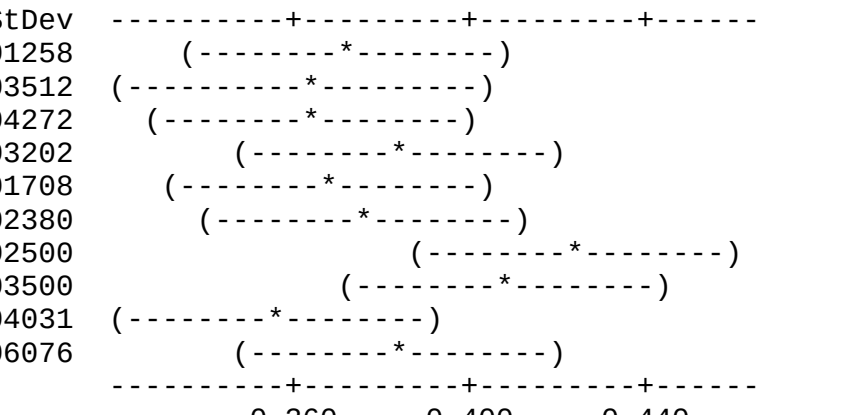
One-way Analysis of Variance

Analysis of Variance for R-5 Weig

Source	DF	SS	MS	F	P
R-5	9	0.01533	0.00170	1.39	0.238
Error	29	0.03557	0.00123		
Total	38	0.05090			

Level	N	Mean	StDev
CONTROL	4	0.37250	0.01258
R5AD1W	3	0.36333	0.03512
R5AM1W	4	0.36250	0.04272
R5AN1W	4	0.38250	0.03202
R5AU1W	4	0.36750	0.01708
R5BD1W	4	0.37500	0.02380
R5BM1W	4	0.42250	0.02500
R5BN1W	4	0.40750	0.03500
R5BU1W	4	0.35750	0.04031
R5CM1W	4	0.38250	0.06076

Individual 95% CIs For Mean
Based on Pooled StDev



Pooled StDev = 0.03502

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00767

Critical value = 2.87

Control = level (CONTROL) of R-5

Level	Lower	Center	Upper
R5AD1W	-0.08581	-0.00917	0.06748
R5AM1W	-0.08096	-0.01000	0.06096

```
R5AN1W    -0.06096   0.01000   0.08096      (-----------*----------)
R5AU1W    -0.07596  -0.00500   0.06596   (-----------*-----------)
R5BD1W    -0.06846   0.00250   0.07346     (----------*-----------)
R5BM1W    -0.02096   0.05000   0.12096             (----------*-----------)
R5BN1W    -0.03596   0.03500   0.10596          (-----------*-----------)
R5BU1W    -0.08596  -0.01500   0.05596  (----------*-----------)
R5CM1W    -0.06096   0.01000   0.08096      (-----------*----------)
                                       -----+---------+---------+---------+--
                                         -0.060     0.000     0.060     0.120
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00187

Critical value = 4.84

Intervals for (column level mean) - (row level mean)

	CONTROL	R5AD1W	R5AM1W	R5AN1W	R5AU1W	R5BD1W
R5AD1W	-0.08237 0.10071					
R5AM1W	-0.07475 0.09475	-0.09071 0.09237				
R5AN1W	-0.09475 0.07475	-0.11071 0.07237	-0.10475 0.06475			
R5AU1W	-0.07975 0.08975	-0.09571 0.08737	-0.08975 0.07975	-0.06975 0.09975		
R5BD1W	-0.08725 0.08225	-0.10321 0.07987	-0.09725 0.07225	-0.07725 0.09225	-0.09225 0.07725	

R5BM1W	-0.13475	-0.15071	-0.14475	-0.12475	-0.13975	-0.13225
	0.03475	0.03237	0.02475	0.04475	0.02975	0.03725
R5BN1W	-0.11975	-0.13571	-0.12975	-0.10975	-0.12475	-0.11725
	0.04975	0.04737	0.03975	0.05975	0.04475	0.05225
R5BU1W	-0.06975	-0.08571	-0.07975	-0.05975	-0.07475	-0.06725
	0.09975	0.09737	0.08975	0.10975	0.09475	0.10225
R5CM1W	-0.09475	-0.11071	-0.10475	-0.08475	-0.09975	-0.09225
	0.07475	0.07237	0.06475	0.08475	0.06975	0.07725

	R5BM1W	R5BN1W	R5BU1W
R5BN1W	-0.06975		
	0.09975		
R5BU1W	-0.01975	-0.03475	
	0.14975	0.13475	
R5CM1W	-0.04475	-0.05975	-0.10975
	0.12475	0.10975	0.05975

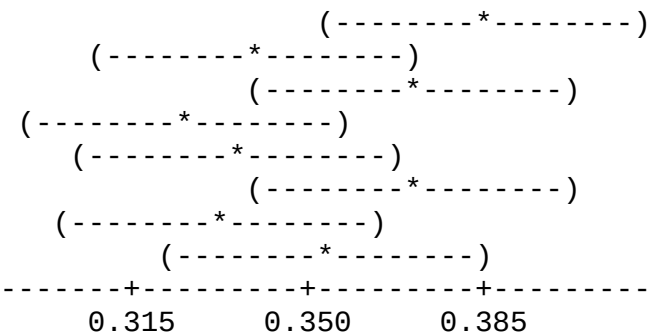
One-way Analysis of Variance

Analysis of Variance for R-6 Weig

Source	DF	SS	MS	F	P
R-6	7	0.013600	0.001943	2.10	0.083
Error	24	0.022200	0.000925		
Total	31	0.035800			

Level	N	Mean	StDev
CONTROL	4	0.38500	0.02646
R6AD1W	4	0.34000	0.02944
R6AM1W	4	0.37250	0.04193
R6AM2W	4	0.32500	0.03109
R6AU1W	4	0.33750	0.03594
R6BM1W	4	0.37250	0.02062
R6BU1W	4	0.33250	0.03304
R6CM1W	4	0.35500	0.01732

Individual 95% CIs For Mean Based on Pooled StDev



Pooled StDev = 0.03041

Dunnett's intervals for treatment mean minus control mean

Family error rate = 0.0500
Individual error rate = 0.00960

Critical value = 2.81

Control = level (CONTROL) of R-6

Level	Lower	Center	Upper
R6AD1W	-0.10552	-0.04500	0.01552
R6AM1W	-0.07302	-0.01250	0.04802
R6AM2W	-0.12052	-0.06000	0.00052

```
R6AU1W    -0.10802  -0.04750   0.01302    (------------*-----------)
R6BM1W    -0.07302  -0.01250   0.04802           (------------*-----------)
R6BU1W    -0.11302  -0.05250   0.00802   (------------*-----------)
R6CM1W    -0.09052  -0.03000   0.03052        (-----------*-----------)
                                       -----+---------+---------+---------+--
                                         -0.100    -0.050    -0.000     0.050
```

Tukey's pairwise comparisons

Family error rate = 0.0500
Individual error rate = 0.00294

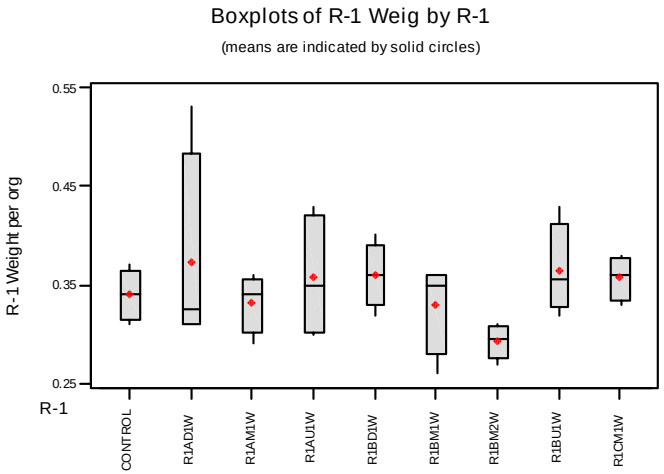
Critical value = 4.68

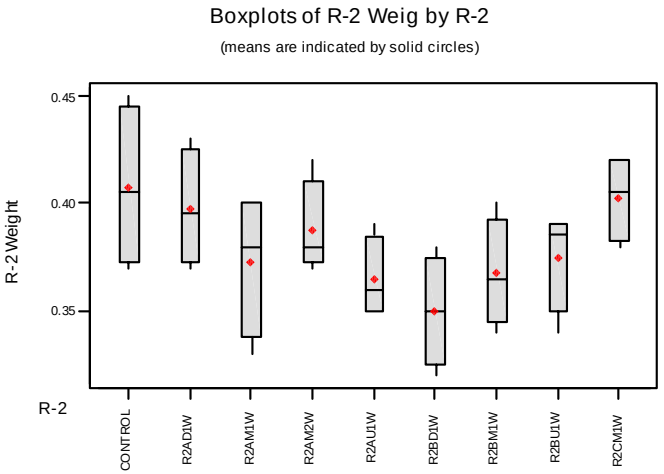
Intervals for (column level mean) - (row level mean)

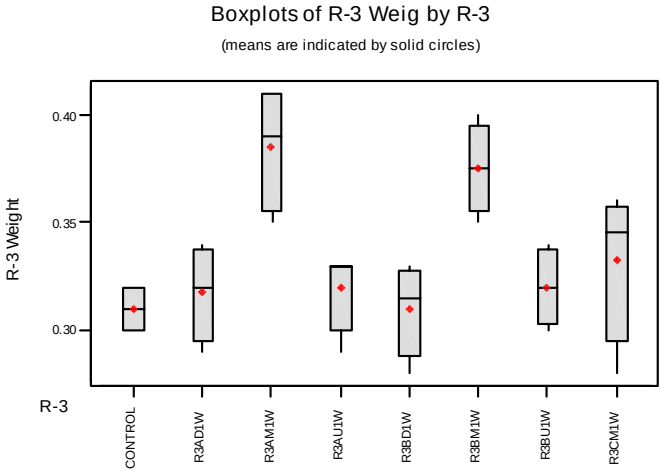
	CONTROL	R6AD1W	R6AM1W	R6AM2W	R6AU1W	R6BM1W
R6AD1W	-0.02617 0.11617					
R6AM1W	-0.05867 0.08367	-0.10367 0.03867				
R6AM2W	-0.01117 0.13117	-0.05617 0.08617	-0.02367 0.11867			
R6AU1W	-0.02367 0.11867	-0.06867 0.07367	-0.03617 0.10617	-0.08367 0.05867		
R6BM1W	-0.05867 0.08367	-0.10367 0.03867	-0.07117 0.07117	-0.11867 0.02367	-0.10617 0.03617	
R6BU1W	-0.01867 0.12367	-0.06367 0.07867	-0.03117 0.11117	-0.07867 0.06367	-0.06617 0.07617	-0.03117 0.11117

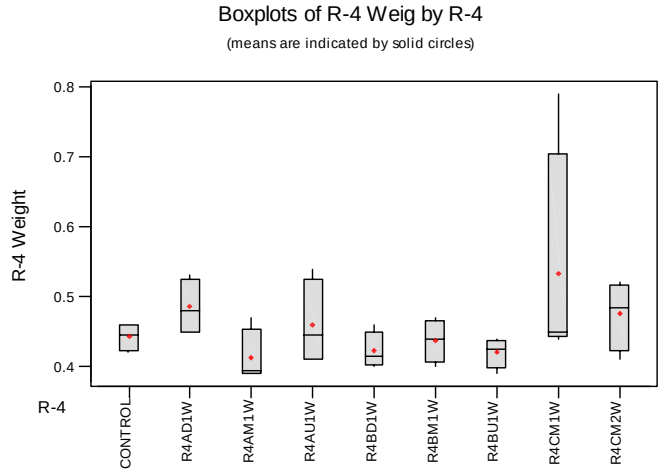
R6CM1W	-0.04117	-0.08617	-0.05367	-0.10117	-0.08867	-0.05367
	0.10117	0.05617	0.08867	0.04117	0.05367	0.08867

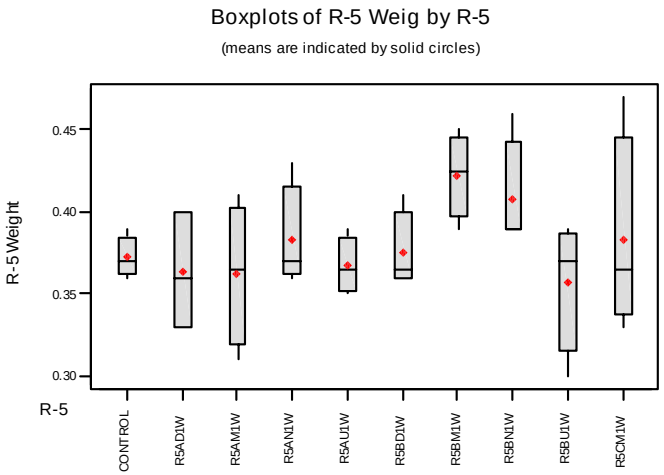
	R6BU1W
R6CM1W	-0.09367
	0.04867

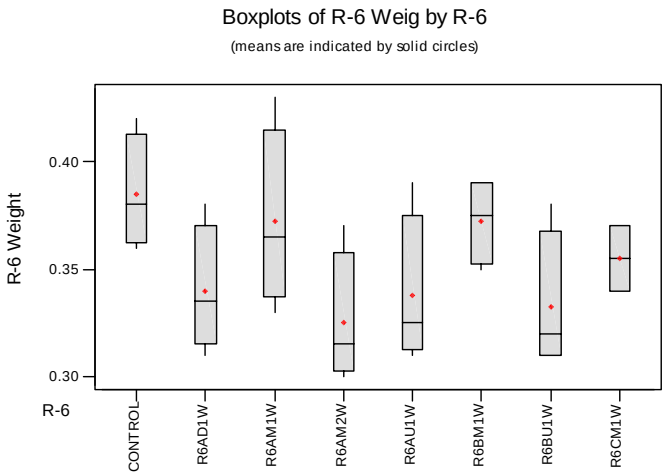

Boxplots of R-1 Weig by R-1
(means are indicated by solid circles)
R-1 Weight per org
0.55
0.45
0.35
0.25
R-1
CONTROL
R1AD1W
R1AM1W
R1AU1W
R1BD1W
R1BM1W
R1BM2W
R1BU1W
R1CM1W


Boxplots of R-2 Weig by R-2
(means are indicated by solid circles)
R-2 Weight
0.45
0.40
0.35
R-2
CONTROL
R2AD1W
R2AM1W
R2AM2W
R2AU1W
R2BD1W
R2BM1W
R2BU1W
R2CM1W


Boxplots of R-3 Weig by R-3
(means are indicated by solid circles)
R-3 Weight
0.40
0.35
0.30
R-3
CONTROL
R3AD1W
R3AM1W
R3AU1W
R3BD1W
R3BM1W
R3BU1W
R3CM1W


Boxplots of R-4 Weig by R-4
(means are indicated by solid circles)
R-4 Weight
0.8
0.7
0.6
0.5
0.4
R-4
CONTROL
R4AD1W
R4AM1W
R4AU1W
R4BD1W
R4BM1W
R4BU1W
R4CM1W
R4CM2W


Boxplots of R-5 Weig by R-5
(means are indicated by solid circles)
R-5 Weight
0.45
0.40
0.35
0.30
R-5
CONTROL
R5AD1W
R5AM1W
R5AN1W
R5AU1W
R5BD1W
R5BM1W
R5BN1W
R5BU1W
R5CM1W


Boxplots of R-6 Weig by R-6
(means are indicated by solid circles)
R-6 Weight
0.40
0.35
0.30
R-6
CONTROL
R6AD1W
R6AM1W
R6AM2W
R6AU1W
R6BM1W
R6BU1W
R6CM1W

Appendix II-G

Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.52	U	0.52	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.22	U	0.22	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.27	U	0.27	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.46	U	0.46	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.23	UJ	0.23	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.45	U	0.45	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.2	UJ	0.2	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.44	U	0.44	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.27	U	0.27	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.32	U	0.32	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.7	U	0.7	pg/g
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.23	U	0.23	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.32	U	0.32	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.27	U	0.27	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.2	U	0.2	pg/g
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	3.5	J	10	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	32	J	20	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.7	U	1.7	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	2		0.85	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	81		0.91	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.34	U	0.34	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.43	U	0.43	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	3.7		0.85	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.37		0.85	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.1		0.01	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	360	J	0.05	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.43	U	0.43	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	48		47	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	84		0.91	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0047	J	0.017	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.94		3.5	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	2.6	U	2.6	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.76	U	0.76	pg/g
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3		1	%
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	75		94	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.86	U	0.86	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.86	U	0.86	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2900	J	45	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.86	U	0.86	mg/kg
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.52	U	0.52	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.27	U	0.27	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.46	U	0.46	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.27	U	0.27	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.7	U	0.7	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.32	U	0.32	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.27	U	0.27	pg/g
CONT.#1	Clam-CONT.#1	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.63		0.12	pg/g
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.86	U	0.86	mg/kg
CONT.#1	Clam-CONT.#1	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	2.7	J	0.02	mg/kg
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.79	UJ	0.79	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.55	UJ	0.55	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.68	UJ	0.68	pg/g

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.66	UJ	0.66	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.49	UJ	0.49	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.59	UJ	0.59	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.44	UJ	0.44	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.55	UJ	0.55	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.55	UJ	0.55	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.44	UJ	0.44	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.7	UJ	0.7	pg/g
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.51	UJ	0.51	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.4	UJ	0.4	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.29	UJ	0.29	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.31	UJ	0.31	pg/g
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	4.9	J	8.3	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	6.4	J	10	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	45		20	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	2.2		0.85	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	56		0.91	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.37	U	0.37	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.46	U	0.46	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	2.9		0.85	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.37		0.85	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	5.2		0.01	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	300	U	300	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	280		0.05	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.46	U	0.46	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	63		47	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	65		0.91	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0093		0.017	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.45		3.5	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	2.4	UJ	2.4	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	1.2	UJ	1.2	pg/g
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	9.6	UJ	9.6	%
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	110		94	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.92	U	0.92	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.92	U	0.92	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2100		45	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.92	U	0.92	mg/kg
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.79	UJ	0.79	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.68	UJ	0.68	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.66	UJ	0.66	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.55	UJ	0.55	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.7	UJ	0.7	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.44	UJ	0.44	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.29	UJ	0.29	pg/g
CONT.#2	Clam-CONT.#2	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.7	UJ	1.7	pg/g
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.92	U	0.92	mg/kg
CONT.#2	Clam-CONT.#2	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	4.1		0.02	mg/kg
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.13	U	0.13	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.12	U	0.12	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.15	U	0.15	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.17	U	0.17	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.089	U	0.089	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.15	U	0.15	pg/g

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.079	U	0.079	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.15	U	0.15	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.1	UJ	0.1	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.23	U	0.23	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.32	U	0.32	pg/g
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.093	U	0.093	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.23	U	0.23	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.12	U	0.12	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.17	U	0.17	pg/g
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	5.6	J	10	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	61	J	20	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.5		0.85	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	88		0.91	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.39	U	0.39	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.49	U	0.49	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	5		0.85	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.64		0.85	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	6.2		0.01	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	280	J	0.05	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.49	U	0.49	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	110		47	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	480		0.91	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.018	UJ	0.018	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	1.1		3.5	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	1.1	U	1.1	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.22	U	0.22	pg/g
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	1.3		1	%
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	150		94	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.97	U	0.97	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.97	U	0.97	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	1500	J	45	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.97	U	0.97	mg/kg
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.22	U	0.22	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.15	U	0.15	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.17	U	0.17	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.33	U	0.33	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.32	U	0.32	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.64	U	0.64	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.12	U	0.12	pg/g
CONT.#3	Clam-CONT.#3	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.3	U	1.3	pg/g
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	1.2		0.85	mg/kg
CONT.#3	Clam-CONT.#3	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	6.8	J	0.02	mg/kg
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.74	U	0.74	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.17	UJ	0.17	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.084	UJ	0.084	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.049	U	0.049	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.093	U	0.093	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.069	U	0.069	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.053	U	0.053	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.092	U	0.092	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.064	U	0.064	pg/g

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.049	UJ	0.049	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.067	UJ	0.067	pg/g
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.056	U	0.056	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.046	U	0.046	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.023	UJ	0.023	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.076	UJ	0.076	pg/g
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	9.7	J	10	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	83		20	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.7	U	1.7	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.4		0.85	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	89		0.91	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.34	U	0.34	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.43	U	0.43	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	4.1		0.85	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.51		0.85	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	7.3		0.01	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	150	J	990	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	480	J	0.05	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.43	U	0.43	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	120		47	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	330		0.91	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	1400	J	2000	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.018	U	0.018	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.96		3.5	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	11		1.1	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.36	U	0.36	pg/g
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	2.2		1	%
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	150	J	94	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.86	U	0.86	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.86	U	0.86	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	1600		45	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.86	U	0.86	mg/kg
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	1.2	U	1.2	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.17	UJ	0.17	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.14	U	0.14	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.23	U	0.23	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.2	UJ	0.2	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.44	UJ	0.44	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.045	UJ	0.045	pg/g
R1AD1S	Clam-R1AD1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.2	UJ	1.2	pg/g
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	1		0.85	mg/kg
R1AD1S	Clam-R1AD1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	10		0.02	mg/kg
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.39	U	0.39	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.29	U	0.29	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.34	U	0.34	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.44	U	0.44	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.28	U	0.28	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.48	U	0.48	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.22	U	0.22	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.41	U	0.41	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.29	U	0.29	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.37	U	0.37	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.68	U	0.68	pg/g
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.29	U	0.29	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.37	U	0.37	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.26	U	0.26	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.28	U	0.28	pg/g
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	11	J	8.3	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	8.9	J	10	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	60		20	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.7	U	1.7	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	0.85	U	0.85	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	110		0.91	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.34	U	0.34	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.43	U	0.43	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	0.85	U	0.85	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.38		0.85	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	5.2		0.01	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	3.7	J	100	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	190	J	0.05	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.43	U	0.43	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	68		47	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	290		0.91	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	3100		2000	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	1600	J	2000	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.019	U	0.019	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.52		3.5	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	4.3	U	4.3	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.66	U	0.66	pg/g
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	5		1	%
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	84	J	94	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.85	U	0.85	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.85	U	0.85	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2200		45	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.85	U	0.85	mg/kg
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.45	U	0.45	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.34	U	0.34	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.52	U	0.52	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.29	U	0.29	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.98	U	0.98	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.43	U	0.43	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.26	U	0.26	pg/g
R1AM1S	Clam-R1AM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.2	U	1.2	pg/g
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.86	U	0.86	mg/kg
R1AM1S	Clam-R1AM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	4.5		0.02	mg/kg
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.35	U	0.35	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.25	U	0.25	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.31	U	0.31	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.33	U	0.33	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.23	U	0.23	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.29	U	0.29	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.2	U	0.2	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.27	U	0.27	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.25	U	0.25	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.22	U	0.22	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.37	U	0.37	pg/g
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.24	U	0.24	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.21	U	0.21	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.16	U	0.16	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.15	U	0.15	pg/g
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	11	J	3	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	25	U	25	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	6.3	J	10	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	51		20	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	0.94		0.85	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	130		0.91	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.36	U	0.36	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.45	U	0.45	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	1.4		0.85	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.75		0.85	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	3.7		0.01	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	300	U	300	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	120	J	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	230		0.05	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.45	U	0.45	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	66		47	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	500		0.91	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0046		0.017	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.8		3.5	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	2.3	U	2.3	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.57	U	0.57	pg/g
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.7		1	%
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	84		94	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.89	U	0.89	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.89	U	0.89	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2100		45	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.89	U	0.89	mg/kg
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.35	U	0.35	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.31	U	0.31	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.33	U	0.33	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.25	U	0.25	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.37	U	0.37	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.22	U	0.22	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.16	U	0.16	pg/g
R1AU1S	Clam-R1AU1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.2	U	1.2	pg/g
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.82		0.85	mg/kg
R1AU1S	Clam-R1AU1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	4.2		0.02	mg/kg
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.51	U	0.51	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.35	UJ	0.35	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.16	UJ	0.16	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.14	U	0.14	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.094	U	0.094	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.14	U	0.14	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.084	U	0.084	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.13	U	0.13	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.098	U	0.098	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.076	UJ	0.076	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.18	UJ	0.18	pg/g
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.093	U	0.093	pg/g

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.075	UJ	0.075	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.054	UJ	0.054	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.1	UJ	0.1	pg/g
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	21		8.3	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	14	J	10	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	2.4	J	10	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	35		20	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.1		0.85	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	120		0.91	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.37	U	0.37	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.46	U	0.46	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	4.5		0.85	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.47		0.85	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	6.6		0.01	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	230	J	0.05	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.46	U	0.46	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	82		47	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	420		0.91	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	J	2000	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.019	U	0.019	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.98		3.5	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	3.6	U	3.6	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.6	U	0.6	pg/g
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	2.8		1	%
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	120	J	94	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.92	U	0.92	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.92	U	0.92	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2000		45	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.92	U	0.92	mg/kg
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.53	U	0.53	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.35	UJ	0.35	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.14	U	0.14	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.098	U	0.098	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.34	UJ	0.34	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.095	UJ	0.095	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.054	UJ	0.054	pg/g
R1BD1S	Clam-R1BD1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.32	UJ	0.32	pg/g
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.92	U	0.92	mg/kg
R1BD1S	Clam-R1BD1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	5.7		0.02	mg/kg
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.36	U	0.36	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.13	UJ	0.13	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.049	UJ	0.049	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.05	U	0.05	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.089	U	0.089	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.049	U	0.049	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.034	U	0.034	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.092	U	0.092	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.049	U	0.049	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.055	UJ	0.055	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.052	UJ	0.052	pg/g
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.062	U	0.062	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.057	UJ	0.057	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.026	UJ	0.026	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.11	UJ	0.11	pg/g

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	12		10	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	20	J	20	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	0.78		0.85	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	130		0.91	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.48	U	0.48	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	0.96	U	0.96	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.35		0.85	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	3.6		0.01	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	170	J	0.05	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.48	U	0.48	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	54		47	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	360		0.91	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	4500		2000	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.017	U	0.017	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.35		3.5	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	2.3	U	2.3	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.3	U	0.3	pg/g
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.6		1	%
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	75	J	94	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.96	U	0.96	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.96	U	0.96	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2300		45	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.96	U	0.96	mg/kg
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.36	U	0.36	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.12	UJ	0.12	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.092	U	0.092	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.089	U	0.089	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.18	UJ	0.18	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.078	UJ	0.078	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.044	UJ	0.044	pg/g
R1BM1S	Clam-R1BM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.12	UJ	0.12	pg/g
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.96	U	0.96	mg/kg
R1BM1S	Clam-R1BM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	2.3		0.02	mg/kg
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.2	U	0.2	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.25	U	0.25	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.24	U	0.24	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.14	U	0.14	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.22	U	0.22	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.13	U	0.13	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.16	U	0.16	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.15	U	0.15	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.22	U	0.22	pg/g
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.15	U	0.15	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.14	U	0.14	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	1746-01-6	T	2,3,7,8-TCDD	0.12	U	0.12	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.12	U	0.12	pg/g
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8151	94-75-7	T	2,4-D	8.6	J	8.3	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8151	94-82-6	T	2,4-DB	3.9	J	8.3	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	72-55-9	T	4,4'-DDE	9.1	J	10	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7429-90-5	T	Aluminum	40		20	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-36-0	T	Antimony	1.7	U	1.7	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-38-2	T	Arsenic	1.2		0.85	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-39-3	T	Barium	92		0.91	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-41-7	T	Beryllium	0.35	U	0.35	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-43-9	T	Cadmium	0.43	U	0.43	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-47-3	T	Chromium	5		0.85	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-48-4	T	Cobalt	0.47		0.85	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-50-8	T	Copper	4.2		0.01	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8151	120-36-5	T	Dichlorprop	4.2	J	100	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7439-89-6	T	Iron	220		0.05	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7439-92-1	T	Lead	0.43	U	0.43	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7439-95-4	T	Magnesium	65		47	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7439-96-5	T	Manganese	310		0.91	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	7471	7439-97-6	T	Mercury	0.005		0.017	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-02-0	T	Nickel	0.64		3.5	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	3268-87-9	T	OCDD	1.9	U	1.9	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	39001-02-0	T	OCDF	0.22	U	0.22	pg/g
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	Q847	T	Percent Lipids	5.4		1	%
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-09-7	T	Potassium	110		94	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7782-49-2	T	Selenium	0.87	U	0.87	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-22-4	T	Silver	0.87	U	0.87	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-23-5	T	Sodium	1700		45	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-28-0	T	Thallium	0.87	U	0.87	mg/kg
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	37871-00-4	T	Total HpCDD	0.23	U	0.23	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	38998-75-3	T	Total HpCDF	0.25	U	0.25	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	34465-46-8	T	Total HxCDD	0.24	U	0.24	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	55684-94-1	T	Total HxCDF	0.16	U	0.16	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	36088-22-9	T	Total PeCDD	0.42	U	0.42	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	30402-15-4	T	Total PeCDF	0.18	U	0.18	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	41903-57-5	T	Total TCDD	0.12	U	0.12	pg/g
R1BM2S	Clam-R1BM2S	02/06/03	Field Duplicate	8290	55722-27-5	T	Total TCDF	1.6	U	1.6	pg/g
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-62-2	T	Vanadium	0.87	U	0.87	mg/kg
R1BM2S	Clam-R1BM2S	02/06/2003	Field Duplicate	6010	7440-66-6	T	Zinc	4.2		0.02	mg/kg
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.23	U	0.23	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.17	U	0.17	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.22	U	0.22	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.21	U	0.21	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.15	U	0.15	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.19	U	0.19	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.13	U	0.13	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.17	U	0.17	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.14	U	0.14	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.16	U	0.16	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.13	U	0.13	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.1	U	0.1	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.13	U	0.13	pg/g
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	12	J	8.3	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	5.4	J	8.3	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	UJ	5100	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	UJ	5100	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	UJ	2000	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	UJ	5100	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	9.2	J	10	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	UJ	5100	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	UJ	5100	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	62		20	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	2.2		0.85	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	130		0.91	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.39	U	0.39	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.49	U	0.49	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	0.97	U	0.97	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	1		0.85	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	8		0.01	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	300	U	300	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	UJ	990	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	840		0.05	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.49	U	0.49	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	100		47	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	840		0.91	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2900	J	2000	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0099		0.017	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.96		3.5	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	1.9	U	1.9	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.18	U	0.18	pg/g
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	UJ	2000	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	UJ	5100	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.4		1	%
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	UJ	5100	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	140		94	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	UJ	990	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.97	U	0.97	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.97	U	0.97	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	1600		45	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.97	U	0.97	mg/kg
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.33	U	0.33	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.22	U	0.22	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.21	U	0.21	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.17	U	0.17	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.41	U	0.41	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.38	U	0.38	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.1	U	0.1	pg/g
R1BU1S	Clam-R1BU1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	2.7	U	2.7	pg/g
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	49		10	ug/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	1.6		0.85	mg/kg
R1BU1S	Clam-R1BU1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	7.6		0.02	mg/kg
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.41	U	0.41	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.23	U	0.23	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.28	U	0.28	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.34	U	0.34	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.29	U	0.29	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.3	U	0.3	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.26	U	0.26	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.28	U	0.28	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.33	U	0.33	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.28	U	0.28	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.48	U	0.48	pg/g
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.31	U	0.31	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.26	U	0.26	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.2	U	0.2	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.19	U	0.19	pg/g
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	3.5	J	3	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	14	J	8.3	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	25	U	25	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	9.6	J	10	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	37		20	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	0.83		0.85	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	110		0.91	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.47	U	0.47	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	1.6		0.85	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.5		0.85	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.2		0.01	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	4.9	J	100	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	220		0.05	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.47	U	0.47	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	61		47	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	350		0.91	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0054		0.017	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	1.1		3.5	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	1.3	U	1.3	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.59	U	0.59	pg/g
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	5.3		1	%
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	90		94	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.94	U	0.94	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.94	U	0.94	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2000		45	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.94	U	0.94	mg/kg
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.41	U	0.41	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.28	U	0.28	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.34	U	0.34	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.33	U	0.33	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.48	U	0.48	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.28	U	0.28	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.2	U	0.2	pg/g
R1CM1S	Clam-R1CM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.42	U	0.42	pg/g
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.69		0.85	mg/kg
R1CM1S	Clam-R1CM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	4.2		0.02	mg/kg
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.49	U	0.49	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.3	U	0.3	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.34	U	0.34	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.46	U	0.46	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.26	U	0.26	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.51	U	0.51	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.21	U	0.21	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.44	U	0.44	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.28	U	0.28	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.39	U	0.39	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.69	U	0.69	pg/g
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.27	U	0.27	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.39	U	0.39	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.32	U	0.32	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.3	U	0.3	pg/g
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	7.8	J	10	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	47		20	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	3.6		0.85	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	90		0.91	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.35	U	0.35	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.44	U	0.44	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	1.9		0.85	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.28		0.85	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	5.2		0.01	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	540	J	0.05	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.44	U	0.44	mg/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	60		47	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	56		0.91	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0041		0.017	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.28		3.5	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	6.7	J	1.1	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.67	U	0.67	pg/g
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	1.7		1	%
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	110	J	94	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.88	U	0.88	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.88	U	0.88	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2500		45	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.88	U	0.88	mg/kg
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.91	U	0.91	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.34	U	0.34	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.57	U	0.57	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.28	U	0.28	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.95	U	0.95	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.44	U	0.44	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.32	U	0.32	pg/g
R2AD1S	Clam-R2AD1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.38	U	0.38	pg/g
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.88	U	0.88	mg/kg
R2AD1S	Clam-R2AD1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	3.8		0.02	mg/kg
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.25	U	0.25	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.12	U	0.12	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.11	U	0.11	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.16	U	0.16	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.077	U	0.077	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.14	U	0.14	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.069	U	0.069	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.14	U	0.14	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.09	UJ	0.09	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.2	U	0.2	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.26	U	0.26	pg/g
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.08	U	0.08	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.2	U	0.2	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.078	U	0.078	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.17	U	0.17	pg/g
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	14		8.3	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	9.7	J	10	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	70		20	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	3.7		0.85	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	200		0.91	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.36	U	0.36	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.45	U	0.45	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	1.3		0.85	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.94		0.85	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.7		0.01	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	800	J	0.05	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.45	U	0.45	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	80		47	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	890		0.91	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2200		2000	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.019	U	0.019	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.75		3.5	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	3.9	U	3.9	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.17	U	0.17	pg/g
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	1.7		1	%
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	79	J	94	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.91	U	0.91	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.91	U	0.91	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2400		45	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.91	U	0.91	mg/kg
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.34	U	0.34	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.12	U	0.12	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.16	U	0.16	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.15	U	0.15	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.26	U	0.26	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.31	U	0.31	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.078	U	0.078	pg/g
R2AM1S	Clam-R2AM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.3	U	1.3	pg/g
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	1.5		0.85	mg/kg
R2AM1S	Clam-R2AM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	2.9		0.02	mg/kg
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.21	U	0.21	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.18	U	0.18	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.22	U	0.22	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.23	U	0.23	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.14	U	0.14	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.13	U	0.13	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.19	U	0.19	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.16	U	0.16	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.16	U	0.16	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.24	U	0.24	pg/g
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.15	U	0.15	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.15	U	0.15	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	1746-01-6	T	2,3,7,8-TCDD	0.12	U	0.12	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.12	U	0.12	pg/g
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8151	94-82-6	T	2,4-DB	25	U	25	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	72-55-9	T	4,4'-DDE	10		10	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7429-90-5	T	Aluminum	44		20	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-38-2	T	Arsenic	2		0.85	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-39-3	T	Barium	110		0.91	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-41-7	T	Beryllium	0.37	U	0.37	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-43-9	T	Cadmium	0.47	U	0.47	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-47-3	T	Chromium	2		0.85	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-48-4	T	Cobalt	0.63		0.85	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-50-8	T	Copper	3.9		0.01	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8151	120-36-5	T	Dichlorprop	17	J	100	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7439-89-6	T	Iron	430		0.05	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7439-92-1	T	Lead	0.35		0.42	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7439-95-4	T	Magnesium	63		47	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7439-96-5	T	Manganese	420		0.91	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8151	93-65-2	T	MCPP	2400	J	2000	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	7471	7439-97-6	T	Mercury	0.0069		0.017	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-02-0	T	Nickel	0.64		3.5	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	3268-87-9	T	OCDD	4.6	U	4.6	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	39001-02-0	T	OCDF	0.32	U	0.32	pg/g
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	Q847	T	Percent Lipids	2.3		1	%
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-09-7	T	Potassium	91		94	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7782-49-2	T	Selenium	0.93	U	0.93	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-22-4	T	Silver	0.93	U	0.93	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-23-5	T	Sodium	2000		45	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-28-0	T	Thallium	0.93	U	0.93	mg/kg
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	37871-00-4	T	Total HpCDD	0.34	U	0.34	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	38998-75-3	T	Total HpCDF	0.22	U	0.22	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	34465-46-8	T	Total HxCDD	0.23	U	0.23	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	55684-94-1	T	Total HxCDF	0.16	U	0.16	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	36088-22-9	T	Total PeCDD	0.24	U	0.24	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	30402-15-4	T	Total PeCDF	0.16	U	0.16	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	41903-57-5	T	Total TCDD	0.12	U	0.12	pg/g
R2AM2S	Clam-R2AM2S	02/06/03	Field Duplicate	8290	55722-27-5	T	Total TCDF	0.91	U	0.91	pg/g
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-62-2	T	Vanadium	0.77		0.85	mg/kg
R2AM2S	Clam-R2AM2S	02/06/2003	Field Duplicate	6010	7440-66-6	T	Zinc	5.6		0.02	mg/kg
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.51	U	0.51	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.37	U	0.37	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.46	U	0.46	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.39	U	0.39	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.28	U	0.28	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.35	U	0.35	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.25	U	0.25	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.33	U	0.33	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.32	U	0.32	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.34	U	0.34	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.49	U	0.49	pg/g
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.3	U	0.3	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.32	U	0.32	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.23	U	0.23	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.18	U	0.18	pg/g
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	25	U	25	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	UJ	5100	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	UJ	5100	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	UJ	2000	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	UJ	5100	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	8.8	J	10	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	UJ	5100	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	UJ	5100	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	49		20	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	2.5		0.85	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	130		0.91	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.37	U	0.37	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.46	U	0.46	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	4.1		0.85	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.89		0.85	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.4		0.01	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	12	J	100	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	480		0.05	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.46	U	0.46	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	74		47	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	800		0.91	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	1700	J	2000	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0042		0.017	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.7		3.5	mg/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	1.7	U	1.7	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.66	U	0.66	pg/g
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	UJ	2000	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	UJ	5100	ug/kg
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.6		1	%
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	UJ	5100	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	97		94	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	UJ	990	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.92	U	0.92	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.92	U	0.92	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	1700		45	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.92	U	0.92	mg/kg
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.51	U	0.51	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.46	U	0.46	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.39	U	0.39	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.32	U	0.32	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.49	U	0.49	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.34	U	0.34	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.23	U	0.23	pg/g
R2AU1S	Clam-R2AU1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.86	U	0.86	pg/g
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	1.1		0.85	mg/kg
R2AU1S	Clam-R2AU1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	7.6		0.02	mg/kg
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.37	U	0.37	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.18	UJ	0.18	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.16	UJ	0.16	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.062	U	0.062	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.11	U	0.11	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.054	U	0.054	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.056	U	0.056	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.11	U	0.11	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.058	U	0.058	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.054	UJ	0.054	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.074	UJ	0.074	pg/g
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.079	U	0.079	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.075	UJ	0.075	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.047	UJ	0.047	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.14	UJ	0.14	pg/g
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	22		8.3	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	10		10	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	44		20	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.3		0.85	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	150		0.91	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.39	U	0.39	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.49	U	0.49	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	1.7		0.85	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.42		0.85	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4		0.01	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	290	J	0.05	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.49	U	0.49	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	62		47	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	480		0.91	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	1600	J	2000	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.018	U	0.018	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.69		3.5	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	4.4	U	4.4	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.43	U	0.43	pg/g
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	1		1	%
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	66	J	94	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.97	U	0.97	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.97	U	0.97	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2300		45	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.97	U	0.97	mg/kg
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.4	U	0.4	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.18	UJ	0.18	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.11	U	0.11	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.92	U	0.92	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.29	UJ	0.29	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.8	U	0.8	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.052	UJ	0.052	pg/g
R2BD1S	Clam-R2BD1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.5	UJ	1.5	pg/g
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.97	U	0.97	mg/kg
R2BD1S	Clam-R2BD1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	2.3		0.02	mg/kg
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.21	U	0.21	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.1	U	0.1	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.12	U	0.12	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.16	U	0.16	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.085	U	0.085	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.14	U	0.14	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.076	U	0.076	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.14	U	0.14	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.1	UJ	0.1	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.21	U	0.21	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.27	U	0.27	pg/g
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.089	U	0.089	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.21	U	0.21	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.1	U	0.1	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.17	U	0.17	pg/g
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	9.7	J	10	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	60		20	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	0.75		0.85	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	110		0.91	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.47	U	0.47	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	1.8		0.85	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.63		0.85	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	6.8		0.01	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	230	J	0.05	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.47	U	0.47	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	77		47	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	550		0.91	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	3200		2000	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.019	U	0.019	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.97		3.5	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	1.3	U	1.3	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.15	U	0.15	pg/g

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	2.5		1	%
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	94	J	94	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.94	U	0.94	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.94	U	0.94	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2100		45	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.94	U	0.94	mg/kg
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.21	U	0.21	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.12	U	0.12	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.16	U	0.16	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.1	U	0.1	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.27	U	0.27	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.24	U	0.24	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.1	U	0.1	pg/g
R2BM1S	Clam-R2BM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.81	U	0.81	pg/g
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	1.2		0.85	mg/kg
R2BM1S	Clam-R2BM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	4.4		0.02	mg/kg
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.22	U	0.22	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.12	U	0.12	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.15	U	0.15	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.19	U	0.19	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.08	U	0.08	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.17	U	0.17	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.071	U	0.071	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.17	U	0.17	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.093	UJ	0.093	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.23	U	0.23	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.3	U	0.3	pg/g
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.084	U	0.084	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.23	U	0.23	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.13	U	0.13	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.2	U	0.2	pg/g
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	6.8	J	10	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	30		20	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.2		0.85	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	110		0.91	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.47	U	0.47	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	3.9		0.85	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.49		0.85	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	5.5		0.01	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	220	J	0.05	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.47	U	0.47	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	75		47	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	390		0.91	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	1600	J	2000	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.019	U	0.019	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	1		3.5	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	2	U	2	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.2	U	0.2	pg/g
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	2.1		1	%
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	130	J	94	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.94	U	0.94	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.94	U	0.94	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	1900		45	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.94	U	0.94	mg/kg
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.22	U	0.22	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.15	U	0.15	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.19	U	0.19	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.093	U	0.093	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.35	U	0.35	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.41	U	0.41	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.13	U	0.13	pg/g
R2BU1S	Clam-R2BU1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.6	U	1.6	pg/g
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.94	U	0.94	mg/kg
R2BU1S	Clam-R2BU1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	4.8		0.02	mg/kg
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.26	U	0.26	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.11	U	0.11	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.13	U	0.13	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.17	U	0.17	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.1	U	0.1	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.15	U	0.15	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.093	U	0.093	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.15	U	0.15	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.12	UJ	0.12	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.23	U	0.23	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.31	U	0.31	pg/g
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.11	U	0.11	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.23	U	0.23	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.11	U	0.11	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.17	U	0.17	pg/g
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	7.1	J	10	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	70		20	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	2.2		0.85	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	190		0.91	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.48	U	0.48	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	3.2		0.85	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	1.4		0.85	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.9		0.01	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	490	J	0.05	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.48	U	0.48	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	84		47	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	1300		0.91	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	7800		2000	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.017	U	0.017	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	2		3.5	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	1.7	U	1.7	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.18	U	0.18	pg/g
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.5		1	%

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	120	J	94	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.95	U	0.95	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.95	U	0.95	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2200		45	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.95	U	0.95	mg/kg
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.33	U	0.33	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.13	U	0.13	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.17	U	0.17	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.16	U	0.16	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.31	U	0.31	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.36	U	0.36	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.11	U	0.11	pg/g
R2CM1S	Clam-R2CM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.5	U	1.5	pg/g
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	1.7		0.85	mg/kg
R2CM1S	Clam-R2CM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	4.1		0.02	mg/kg
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.29	U	0.29	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.19	U	0.19	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.23	U	0.23	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.24	U	0.24	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.16	U	0.16	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.22	U	0.22	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.14	U	0.14	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.18	U	0.18	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.18	U	0.18	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.29	U	0.29	pg/g
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.17	U	0.17	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.16	U	0.16	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.13	U	0.13	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.2	U	0.2	pg/g
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	10	U	10	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	13	J	20	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.7	U	1.7	mg/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.1		0.85	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	81		0.91	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.34	U	0.34	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	260	J	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.43	U	0.43	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	4.8		0.85	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.14		0.85	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.1		0.01	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	160	J	0.05	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.43	U	0.43	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	47		47	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	40		0.91	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	580	J	2000	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0044		0.017	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.38		3.5	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	4.3	U	4.3	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.35	U	0.35	pg/g
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.2		1	%
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	120	J	94	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.86	U	0.86	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.86	U	0.86	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2400		45	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.86	U	0.86	mg/kg
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.36	U	0.36	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.23	U	0.23	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.24	U	0.24	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.18	U	0.18	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.29	U	0.29	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.25	U	0.25	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.17	U	0.17	pg/g
R3AD1S	Clam-R3AD1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.95	U	0.95	pg/g
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.25		0.85	mg/kg
R3AD1S	Clam-R3AD1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	3.4		0.02	mg/kg
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	1.3	U	1.3	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.81	U	0.81	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.98	U	0.98	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	1.7	UJ	1.7	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.8	U	0.8	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	1.6	U	1.6	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.69	UJ	0.69	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	1.6	U	1.6	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.93	U	0.93	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.94	U	0.94	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	2.2	U	2.2	pg/g
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.81	U	0.81	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.94	U	0.94	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.48	U	0.48	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.85	U	0.85	pg/g
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	3.1	J	10	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	20	J	20	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.4		0.85	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	95		0.91	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.36	U	0.36	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.45	U	0.45	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	5.8		0.85	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.9	U	0.9	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.6		0.01	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	270	J	0.05	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.45	U	0.45	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	42		47	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	27		0.91	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0049	J	0.017	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	1.7		3.5	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	4.2	U	4.2	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	2.4	U	2.4	pg/g
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	2.8		1	%
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	79		94	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.9	U	0.9	mg/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.9	U	0.9	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2700	J	45	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.9	U	0.9	mg/kg
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	1.3	U	1.3	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.98	U	0.98	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	1.7	U	1.7	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.93	U	0.93	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	2.2	U	2.2	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	1.2	U	1.2	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.48	U	0.48	pg/g
R3AM1S	Clam-R3AM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	2		0.12	pg/g
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.9	U	0.9	mg/kg
R3AM1S	Clam-R3AM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	3.1	J	0.02	mg/kg
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.35	U	0.35	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.14	U	0.14	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.31	U	0.31	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.19	U	0.19	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.17	U	0.17	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.17	U	0.17	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.16	U	0.16	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.16	U	0.16	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.19	U	0.19	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.14	U	0.14	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.18	U	0.18	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.13	U	0.13	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.11	U	0.11	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.11	U	0.11	pg/g
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	4.7	J	10	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	69	J	20	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	4.4		0.85	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	190		0.91	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.35	U	0.35	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.44	U	0.44	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	1.9		0.85	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.99		0.85	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	2.9		0.01	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	4.2	J	100	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	960	J	0.05	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.44	U	0.44	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	64		47	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	880		0.91	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.004	J	0.017	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.73		3.5	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	5.7	J	1.1	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.23	U	0.23	pg/g
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.1		1	%
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	70		94	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.88	U	0.88	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.88	U	0.88	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2600	J	45	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.88	U	0.88	mg/kg
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.39	U	0.39	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.31	U	0.31	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.19	U	0.19	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.056	U	0.056	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.38	U	0.38	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.23	U	0.23	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.11	U	0.11	pg/g
R3AU1S	Clam-R3AU1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.93	U	0.93	pg/g
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	1.4		0.85	mg/kg
R3AU1S	Clam-R3AU1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	2.5	J	0.02	mg/kg
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.62	U	0.62	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.14	U	0.14	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.1	U	0.1	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.13	U	0.13	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.081	U	0.081	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.12	U	0.12	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.059	U	0.059	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.11	U	0.11	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.077	UJ	0.077	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.18	U	0.18	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.25	U	0.25	pg/g
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.069	U	0.069	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.18	U	0.18	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.089	U	0.089	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.28	U	0.28	pg/g
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	5	J	10	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	11	J	20	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.3		0.85	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	54		0.91	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.36	U	0.36	mg/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.45	U	0.45	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	2.2		0.85	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.18		0.85	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.7		0.01	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	160	J	0.05	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.36		0.42	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	54		47	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	33		0.91	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0093	J	0.017	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.25		3.5	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	11		1.1	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.63	U	0.63	pg/g
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	2.9		1	%
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	150		94	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.89	U	0.89	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.89	U	0.89	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	1800	J	45	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.89	U	0.89	mg/kg
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.99	U	0.99	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.42	U	0.42	pg/g

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.13	U	0.13	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.081	U	0.081	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.31	U	0.31	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.29	U	0.29	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.51		0.044	pg/g
R3BD1S	Clam-R3BD1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1	U	1	pg/g
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.89	U	0.89	mg/kg
R3BD1S	Clam-R3BD1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	5	J	0.02	mg/kg
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	1.4	U	1.4	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.27	U	0.27	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.31	U	0.31	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.38	U	0.38	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.23	U	0.23	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.42	U	0.42	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.19	U	0.19	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.36	U	0.36	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.24	U	0.24	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.35	U	0.35	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.67	U	0.67	pg/g
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.24	U	0.24	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.35	U	0.35	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.29	U	0.29	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.26	U	0.26	pg/g
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	5	J	10	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	17	J	20	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.7	U	1.7	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	0.96		0.85	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	61		0.91	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.34	U	0.34	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.42	U	0.42	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	3.2		0.85	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.85	U	0.85	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	3.8		0.01	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	3.1	J	100	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	170	J	0.05	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.42	U	0.42	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	42		47	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	30		0.91	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0054		0.017	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.23		3.5	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	6.1	J	1.1	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.5	U	0.5	pg/g
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	2.1		1	%
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	100	J	94	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.85	U	0.85	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.85	U	0.85	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2600		45	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.85	U	0.85	mg/kg
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	1.5	U	1.5	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.31	U	0.31	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	1.4	U	1.4	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.24	U	0.24	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	1.4	U	1.4	pg/g

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.38	U	0.38	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.29	U	0.29	pg/g
R3BM1S	Clam-R3BM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.54	U	0.54	pg/g
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.85	U	0.85	mg/kg
R3BM1S	Clam-R3BM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	2.9		0.02	mg/kg
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.12	U	0.12	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.13	U	0.13	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.13	U	0.13	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.23	U	0.23	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.19	U	0.19	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.17	U	0.17	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.22	U	0.22	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.25	U	0.25	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.42	U	0.42	pg/g
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.2	U	0.2	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.25	U	0.25	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.19	U	0.19	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.47	U	0.47	pg/g
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	3	U	3	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	15		8.3	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	9.6	J	10	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	60		20	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	2.3		0.85	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	150		0.91	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.37	U	0.37	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	320	J	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.47	U	0.47	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	2.6		0.85	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.83		0.85	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.7		0.01	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	35	J	100	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	600	J	0.05	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.47	U	0.47	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	74		47	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	660		0.91	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	3700	J	2000	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.018	U	0.018	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.88		3.5	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	2.3	U	2.3	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.32	U	0.32	pg/g
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	2.9		1	%
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	87	J	94	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.93	U	0.93	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.93	U	0.93	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2500		45	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.93	U	0.93	mg/kg
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.18	U	0.18	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.13	U	0.13	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.23	U	0.23	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.22	U	0.22	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.42	U	0.42	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.38	U	0.38	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.19	U	0.19	pg/g
R3BU1S	Clam-R3BU1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1	U	1	pg/g

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	1.1		0.85	mg/kg
R3BU1S	Clam-R3BU1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	3.8		0.02	mg/kg
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.15	U	0.15	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.15	U	0.15	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.19	U	0.19	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.1	U	0.1	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.087	U	0.087	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.11	UJ	0.11	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.25	U	0.25	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.33	U	0.33	pg/g
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.1	U	0.1	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.25	U	0.25	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.14	U	0.14	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.22	U	0.22	pg/g
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	7.1	J	10	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	34	J	20	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.4		0.85	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	150		0.91	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.37	U	0.37	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.46	U	0.46	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	1.5		0.85	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.63		0.85	mg/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.3		0.01	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	4.7	J	100	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	240	J	0.05	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.46	U	0.46	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	63		47	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	510		0.91	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.018	UJ	0.018	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.69		3.5	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	1.4	U	1.4	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.22	U	0.22	pg/g
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	1.4		1	%
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	97		94	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.92	U	0.92	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.92	U	0.92	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2400	J	45	mg/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.92	U	0.92	mg/kg
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.24	U	0.24	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.19	U	0.19	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.2	U	0.2	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.48	U	0.48	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.33	U	0.33	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.78	U	0.78	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.14	U	0.14	pg/g
R3CM1S	Clam-R3CM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.4	U	1.4	pg/g
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.92	U	0.92	mg/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R3CM1S	Clam-R3CM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	3.4	J	0.02	mg/kg
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	1.9	U	1.9	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.42	U	0.42	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.53	U	0.53	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.61	U	0.61	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.35	U	0.35	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.54	U	0.54	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.31	U	0.31	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.51	U	0.51	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.39	U	0.39	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.33	U	0.33	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.46	UJ	0.46	pg/g
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.37	U	0.37	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.3	U	0.3	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.24	U	0.24	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.57	U	0.57	pg/g
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	9.4	J	8.3	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	4.3	J	8.3	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	4	J	10	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	32		20	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	2.3		0.85	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	77		0.91	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.36	U	0.36	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.064	J	0.42	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	10		0.85	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.55		0.85	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	6		0.01	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	300	U	300	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	410		0.05	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	63		47	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	110		0.91	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0091		0.017	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	2		3.5	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	45		1.1	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	2.1	U	2.1	pg/g
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	2.9		1	%
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	140		94	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.89	U	0.89	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.89	U	0.89	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2100		45	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.89	U	0.89	mg/kg
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	2.8		0.18	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	1.2	U	1.2	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.61	U	0.61	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.39	U	0.39	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.76	UJ	0.76	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.54	U	0.54	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	1		0.044	pg/g
R4AD1S	Clam-R4AD1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	3.2	U	3.2	pg/g
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.89	U	0.89	mg/kg
R4AD1S	Clam-R4AD1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	8.1		0.02	mg/kg
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.31	U	0.31	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.16	U	0.16	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.23	U	0.23	pg/g

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.22	U	0.22	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.13	U	0.13	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.19	U	0.19	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.12	U	0.12	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.15	U	0.15	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.13	U	0.13	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.21	U	0.21	pg/g
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.14	U	0.14	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.12	U	0.12	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.1	U	0.1	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.21	U	0.21	pg/g
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	25	U	25	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	5.4	J	10	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	42		20	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	3.3		0.85	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	39		0.91	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.37	U	0.37	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.14		0.42	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	57		0.85	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.85		0.85	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	11		0.01	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	300	U	300	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	710		0.05	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	1.1		0.42	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	89		47	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	120		0.91	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.013		0.017	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	25		3.5	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	4.6	U	4.6	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.21	U	0.21	pg/g
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.8		1	%
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	190		94	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.93	U	0.93	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.93	U	0.93	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	1100		45	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.93	U	0.93	mg/kg
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.39	U	0.39	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.23	U	0.23	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.22	U	0.22	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.15	U	0.15	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.34	U	0.34	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.13	U	0.13	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.18	U	0.18	pg/g
R4AM1S	Clam-R4AM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.6	U	1.6	pg/g
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.86		0.85	mg/kg
R4AM1S	Clam-R4AM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	13		0.02	mg/kg
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.29	U	0.29	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.17	U	0.17	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.21	U	0.21	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.21	U	0.21	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.13	U	0.13	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.19	U	0.19	pg/g

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.11	U	0.11	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.17	U	0.17	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.14	U	0.14	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.13	U	0.13	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.21	U	0.21	pg/g
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.13	U	0.13	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.12	U	0.12	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.1	U	0.1	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.17	U	0.17	pg/g
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	7.8	J	8.3	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	6.4	J	10	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	21		20	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.7		0.85	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	54		0.91	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.48	U	0.48	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	4.1		0.85	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.26		0.85	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	5.2		0.01	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	300	U	300	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	260		0.05	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.5		0.42	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	58		47	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	37		0.91	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0065		0.017	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.28		3.5	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	5.7	J	1.1	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.18	U	0.18	pg/g
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.3		1	%
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	130		94	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.96	U	0.96	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.96	U	0.96	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2200		45	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.96	U	0.96	mg/kg
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.4	U	0.4	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.21	U	0.21	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.21	U	0.21	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.16	U	0.16	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.26	U	0.26	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.2	U	0.2	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.1	U	0.1	pg/g
R4AU1S	Clam-R4AU1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.6	U	1.6	pg/g
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.96	U	0.96	mg/kg
R4AU1S	Clam-R4AU1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	5.4		0.02	mg/kg
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.27	U	0.27	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.21	U	0.21	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.26	U	0.26	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.32	U	0.32	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.21	U	0.21	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.28	U	0.28	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.19	U	0.19	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.26	U	0.26	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.24	U	0.24	pg/g

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.24	U	0.24	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.35	U	0.35	pg/g
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.22	U	0.22	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.22	U	0.22	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.15	U	0.15	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.15	U	0.15	pg/g
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	10	U	10	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	5.4	J	20	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.1		0.85	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	55		0.91	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.35	U	0.35	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.44	U	0.44	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	6.1		0.85	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.17		0.85	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.3		0.01	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	3.3	J	100	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	140	J	0.05	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.44	U	0.44	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	48		47	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	52		0.91	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	480	J	2000	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	1100	J	2000	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.018	U	0.018	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	3.5	U	3.5	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	1.9	U	1.9	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.47	U	0.47	pg/g
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.4		1	%
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	120	J	94	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.88	U	0.88	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.88	U	0.88	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2500		45	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.88	U	0.88	mg/kg
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.27	U	0.27	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.26	U	0.26	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.32	U	0.32	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.27	U	0.27	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.35	U	0.35	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.45	U	0.45	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.2	U	0.2	pg/g
R4BD1S	Clam-R4BD1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.6	U	1.6	pg/g
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.22		0.85	mg/kg
R4BD1S	Clam-R4BD1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	3.6		0.02	mg/kg
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.28	U	0.28	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.19	U	0.19	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.24	U	0.24	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.26	U	0.26	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.17	U	0.17	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.23	U	0.23	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.15	U	0.15	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.22	U	0.22	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.19	U	0.19	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.18	U	0.18	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.29	U	0.29	pg/g
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.18	U	0.18	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.17	U	0.17	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.13	U	0.13	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.28	U	0.28	pg/g
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	10	U	10	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	20	J	20	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	2.3		0.85	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	76		0.91	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.48	U	0.48	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	0.96	U	0.96	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.29		0.85	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.6		0.01	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	650	J	0.05	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	50		47	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	94		0.91	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	1200	J	2000	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.019	U	0.019	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.33		3.5	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	3.2	U	3.2	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.37	U	0.37	pg/g
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	1.3		1	%
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	110	J	94	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.96	U	0.96	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.96	U	0.96	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2500		45	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.96	U	0.96	mg/kg
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.28	U	0.28	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.28	U	0.28	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.26	U	0.26	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.68	U	0.68	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.29	U	0.29	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.58	U	0.58	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.34	U	0.34	pg/g
R4BM1S	Clam-R4BM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.6	U	1.6	pg/g
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.44		0.85	mg/kg
R4BM1S	Clam-R4BM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	4.1		0.02	mg/kg
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.27	U	0.27	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.14	U	0.14	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.24	U	0.24	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.16	U	0.16	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.16	U	0.16	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.15	U	0.15	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.15	U	0.15	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.18	U	0.18	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.13	U	0.13	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.17	U	0.17	pg/g
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.17	U	0.17	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.12	U	0.12	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.1	U	0.1	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.22	U	0.22	pg/g
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	2.4	J	10	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	24	J	20	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.7		0.85	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	74		0.91	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.48	U	0.48	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	4		0.85	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.26		0.85	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.7		0.01	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	290	J	0.05	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.33		0.42	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	47		47	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	61		0.91	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0073	J	0.017	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.61		3.5	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	4.6	U	4.6	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.21	U	0.21	pg/g
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.6		1	%
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	79		94	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.95	U	0.95	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.95	U	0.95	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2800	J	45	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.95	U	0.95	mg/kg
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.33	U	0.33	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.24	U	0.24	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.18	U	0.18	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.18	U	0.18	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.29	U	0.29	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.54	U	0.54	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.23	U	0.23	pg/g
R4BU1S	Clam-R4BU1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.2	U	1.2	pg/g
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.95	U	0.95	mg/kg
R4BU1S	Clam-R4BU1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	2.9	J	0.02	mg/kg
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.34	U	0.34	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.13	U	0.13	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.16	U	0.16	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.11	U	0.11	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.16	U	0.16	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.1	U	0.1	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.15	U	0.15	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.13	U	0.13	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.12	U	0.12	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.17	U	0.17	pg/g
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.12	U	0.12	pg/g

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.11	U	0.11	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.1	U	0.1	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.23	U	0.23	pg/g
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	25	U	25	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	4	J	10	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	22		20	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	2.1		0.85	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	55		0.91	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.059		0.42	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	8.4		0.85	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.41		0.85	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	5.4		0.01	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	3	J	100	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	320		0.05	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.48	U	0.48	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	50		47	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	66		0.91	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0094		0.017	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.69		3.5	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	3.5	U	3.5	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.2	U	0.2	pg/g
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	4.3		1	%
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	100		94	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.95	U	0.95	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.95	U	0.95	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2200		45	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.95	U	0.95	mg/kg
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.37	U	0.37	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.16	U	0.16	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.18	U	0.18	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.13	U	0.13	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.31	U	0.31	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.18	U	0.18	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.49	U	0.49	pg/g
R4CM1S	Clam-R4CM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.2	U	1.2	pg/g
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.95	U	0.95	mg/kg
R4CM1S	Clam-R4CM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	5.3		0.02	mg/kg
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.25	U	0.25	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.22	U	0.22	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.27	U	0.27	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.25	U	0.25	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.17	U	0.17	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.22	U	0.22	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.15	U	0.15	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.21	U	0.21	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.19	U	0.19	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.18	U	0.18	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.27	U	0.27	pg/g
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	95-50-1	T	1,2-Dichlorobenzene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	541-73-1	T	1,3-Dichlorobenzene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	106-46-7	T	1,4-Dichlorobenzene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.18	U	0.18	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.17	U	0.17	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	1746-01-6	T	2,3,7,8-TCDD	0.13	U	0.13	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.14	U	0.14	pg/g

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	95-95-4	T	2,4,5-Trichlorophenol	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	88-06-2	T	2,4,6-Trichlorophenol	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8151	94-82-6	T	2,4-DB	25	U	25	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	120-83-2	T	2,4-Dichlorophenol	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	105-67-9	T	2,4-Dimethylphenol	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	51-28-5	T	2,4-Dinitrophenol	5100	UJ	5100	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	121-14-2	T	2,4-Dinitrotoluene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	606-20-2	T	2,6-Dinitrotoluene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	91-58-7	T	2-Chloronaphthalene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	95-57-8	T	2-Chlorophenol	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	91-57-6	T	2-Methylnaphthalene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	88-74-4	T	2-Nitroaniline	5100	UJ	5100	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	88-75-5	T	2-Nitrophenol	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	UJ	2000	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	99-09-2	T	3-Nitroaniline	5100	UJ	5100	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	72-55-9	T	4,4'-DDE	4.1	J	10	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	UJ	5100	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	59-50-7	T	4-Chloro-3-methylphenol	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	100-02-7	T	4-Nitrophenol	5100	UJ	5100	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	83-32-9	T	Acenaphthene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	208-96-8	T	Acenaphthylene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7429-90-5	T	Aluminum	22		20	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	120-12-7	T	Anthracene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-38-2	T	Arsenic	1.7		0.85	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-39-3	T	Barium	71		0.91	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	56-55-3	T	Benzo(a)anthracene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	50-32-8	T	Benzo(a)pyrene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	205-99-2	T	Benzo(b)fluoranthene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	191-24-2	T	Benzo(g,h,i)perylene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	207-08-9	T	Benzo(k)fluoranthene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	85-68-7	T	Benzyl Butyl Phthalate	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-41-7	T	Beryllium	0.36	U	0.36	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-43-9	T	Cadmium	0.45	U	0.45	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	86-74-8	T	Carbazole	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-47-3	T	Chromium	7.9		0.85	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	218-01-9	T	Chrysene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-48-4	T	Cobalt	0.38		0.85	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-50-8	T	Copper	4.9		0.01	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	132-64-9	T	Dibenzofuran	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8151	120-36-5	T	Dichlorprop	6	J	100	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	84-66-2	T	Diethyl Phthalate	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	131-11-3	T	Dimethyl Phthalate	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	84-74-2	T	Di-n-butylphthalate	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	117-84-0	T	Di-n-octylphthalate	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	88-85-7	T	Dinoseb	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	206-44-0	T	Fluoranthene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	86-73-7	T	Fluorene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	118-74-1	T	Hexachlorobenzene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	87-68-3	T	Hexachlorobutadiene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	77-47-4	T	Hexachlorocyclopentadiene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	67-72-1	T	Hexachloroethane	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7439-89-6	T	Iron	280		0.05	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	78-59-1	T	Isophorone	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7439-92-1	T	Lead	0.45	U	0.45	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7439-95-4	T	Magnesium	50		47	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7439-96-5	T	Manganese	73		0.91	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	7471	7439-97-6	T	Mercury	0.0088		0.017	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	91-20-3	T	Naphthalene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-02-0	T	Nickel	1.7		3.5	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	98-95-3	T	Nitrobenzene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	86-30-6	T	N-Nitrosodiphenylamine	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	3268-87-9	T	OCDD	1.7	U	1.7	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	39001-02-0	T	OCDF	0.31	U	0.31	pg/g
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	106-47-8	T	P-Chloroaniline	2000	UJ	2000	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	87-86-5	T	Pentachlorophenol	5100	UJ	5100	ug/kg
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	Q847	T	Percent Lipids	3.6		1	%
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	85-01-8	T	Phenanthrene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	108-95-2	T	Phenol	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	100-01-6	T	P-Nitroaniline	5100	UJ	5100	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-09-7	T	Potassium	120		94	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8270	129-00-0	T	Pyrene	990	UJ	990	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7782-49-2	T	Selenium	0.9	U	0.9	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-22-4	T	Silver	0.9	U	0.9	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-23-5	T	Sodium	2300		45	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-28-0	T	Thallium	0.9	U	0.9	mg/kg
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	37871-00-4	T	Total HpCDD	0.25	U	0.25	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	38998-75-3	T	Total HpCDF	0.27	U	0.27	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	34465-46-8	T	Total HxCDD	0.25	U	0.25	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	55684-94-1	T	Total HxCDF	0.19	U	0.19	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	36088-22-9	T	Total PeCDD	0.27	U	0.27	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	30402-15-4	T	Total PeCDF	0.18	U	0.18	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	41903-57-5	T	Total TCDD	0.15	U	0.15	pg/g
R4CM2S	Clam-R4CM2S	02/06/03	Field Duplicate	8290	55722-27-5	T	Total TCDF	1.5	U	1.5	pg/g
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-62-2	T	Vanadium	0.9	U	0.9	mg/kg
R4CM2S	Clam-R4CM2S	02/06/2003	Field Duplicate	6010	7440-66-6	T	Zinc	4.1		0.02	mg/kg
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	1.1	U	1.1	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.54	U	0.54	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.65	U	0.65	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	1.1	UJ	1.1	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.7	U	0.7	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	1	U	1	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.61	UJ	0.61	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	1	U	1	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.82	U	0.82	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.55	U	0.55	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	1.6	U	1.6	pg/g
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.71	U	0.71	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.56	U	0.56	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.61	U	0.61	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.52	U	0.52	pg/g
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	4.2	J	10	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	30	J	20	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.7		0.85	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	63		0.91	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.47	U	0.47	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	7.2		0.85	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.34		0.85	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	5.8		0.01	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	270	J	0.05	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.47	U	0.47	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	56		47	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	77		0.91	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0058	J	0.017	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	1.1		3.5	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	3.4	U	3.4	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	1.4	U	1.4	pg/g
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	1.5		1	%
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	140		94	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.94	U	0.94	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.94	U	0.94	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2200	J	45	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.94	U	0.94	mg/kg
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	1.1	U	1.1	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.65	U	0.65	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	1.1	U	1.1	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.82	U	0.82	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	1.6	U	1.6	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.8	U	0.8	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.61	U	0.61	pg/g
R5AM1S	Clam-R5AM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.52	U	0.52	pg/g
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.94	U	0.94	mg/kg
R5AM1S	Clam-R5AM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	4.6	J	0.02	mg/kg
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.33	U	0.33	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.15	U	0.15	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.24	U	0.24	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.11	U	0.11	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.09	U	0.09	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.17	U	0.17	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.12	U	0.12	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.13	U	0.13	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.11	U	0.11	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.12	U	0.12	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.08	U	0.08	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.12	U	0.12	pg/g
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	7.2	J	8.3	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	25	U	25	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	UJ	5100	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	UJ	5100	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	UJ	2000	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	UJ	5100	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	5.5	J	10	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	UJ	5100	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	UJ	5100	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	46		20	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	2.3		0.85	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	110		0.91	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.48	U	0.48	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	9.6		0.85	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.88		0.85	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	6		0.01	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	300	U	300	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	UJ	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	480		0.05	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.48	U	0.48	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	86		47	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	660		0.91	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	600	J	2000	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0048		0.017	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	1.1		3.5	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	3.6	U	3.6	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.24	U	0.24	pg/g
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	UJ	2000	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	UJ	5100	ug/kg
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	5.7		1	%
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	UJ	5100	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	140		94	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	UJ	990	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.96	U	0.96	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.96	U	0.96	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	1700		45	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.96	U	0.96	mg/kg
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.4	U	0.4	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.24	U	0.24	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.2	U	0.2	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.12	U	0.12	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.35	U	0.35	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.16	U	0.16	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.14	U	0.14	pg/g
R5AN1S	Clam-R5AN1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.8	U	1.8	pg/g
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	1.2		0.85	mg/kg
R5AN1S	Clam-R5AN1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	7.2		0.02	mg/kg
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.19	U	0.19	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.085	U	0.085	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.11	U	0.11	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.15	U	0.15	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.069	U	0.069	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.13	U	0.13	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.061	U	0.061	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.13	U	0.13	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.08	UJ	0.08	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.15	U	0.15	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.22	U	0.22	pg/g
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.072	U	0.072	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.15	U	0.15	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.094	U	0.094	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.14	U	0.14	pg/g
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	4.6	J	10	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	20	J	20	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.5		0.85	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	86		0.91	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.47	U	0.47	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	1.2		0.85	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.94	U	0.94	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	3.5		0.01	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	240	J	0.05	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.47	U	0.47	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	38		47	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	48		0.91	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.013	J	0.017	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.27		3.5	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	4.3	U	4.3	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.13	U	0.13	pg/g
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.8		1	%
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	99		94	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.94	U	0.94	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.94	U	0.94	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2600	J	45	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.94	U	0.94	mg/kg
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.25	U	0.25	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.11	U	0.11	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.15	U	0.15	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.2	U	0.2	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.24	U	0.24	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.64	U	0.64	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.094	U	0.094	pg/g
R5AU1S	Clam-R5AU1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.3	U	1.3	pg/g
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.94	U	0.94	mg/kg
R5AU1S	Clam-R5AU1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	3.2	J	0.02	mg/kg
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.27	U	0.27	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.16	U	0.16	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.2	U	0.2	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.11	U	0.11	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.16	U	0.16	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.1	U	0.1	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.15	U	0.15	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.12	U	0.12	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.13	U	0.13	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.19	U	0.19	pg/g
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.12	U	0.12	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.12	U	0.12	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.1	U	0.1	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.14	U	0.14	pg/g
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	25	U	25	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	UJ	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	UJ	5100	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	UJ	2000	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	UJ	5100	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	3.2	J	10	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	18		20	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.6		0.85	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	80		0.91	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.37	U	0.37	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.46	U	0.46	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	13		0.85	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.44		0.85	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.6		0.01	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	300	U	300	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	280		0.05	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.46	U	0.46	mg/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	47		47	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	76		0.91	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0053		0.017	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	5.2		3.5	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	2.9	U	2.9	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.15	U	0.15	pg/g
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	UJ	2000	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	4.1		1	%
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	UJ	5100	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	110		94	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	UJ	990	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.92	U	0.92	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.92	U	0.92	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2400		45	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.92	U	0.92	mg/kg
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.27	U	0.27	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.2	U	0.2	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.18	U	0.18	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.12	U	0.12	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.37	U	0.37	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.18	U	0.18	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.12	U	0.12	pg/g
R5BM1S	Clam-R5BM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.6	U	1.6	pg/g
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.92	U	0.92	mg/kg
R5BM1S	Clam-R5BM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	4		0.02	mg/kg
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.21	U	0.21	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.15	U	0.15	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.18	U	0.18	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.23	U	0.23	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.13	U	0.13	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.12	U	0.12	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.19	U	0.19	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.15	U	0.15	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.14	U	0.14	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.14	U	0.14	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.13	U	0.13	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.1	U	0.1	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.12	U	0.12	pg/g
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	4.6	J	3	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	25	U	25	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	UJ	5100	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	UJ	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	UJ	5100	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	UJ	2000	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	UJ	5100	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	19		10	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	3.5	J	10	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	UJ	5100	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	UJ	5100	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	35		20	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.9		0.85	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	120		0.91	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.48	U	0.48	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	0.95	U	0.95	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.66		0.85	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	5		0.01	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	4.1	J	100	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	630		0.05	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.49		0.42	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	69		47	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	500		0.91	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0072		0.017	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.72		3.5	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	4.3	U	4.3	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.18	U	0.18	pg/g
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	UJ	2000	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	UJ	5100	ug/kg
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	4.4		1	%
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	UJ	5100	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	110		94	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	UJ	990	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.95	U	0.95	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.95	U	0.95	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	1800		45	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.95	U	0.95	mg/kg
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.42	U	0.42	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.18	U	0.18	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.23	U	0.23	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.16	U	0.16	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.37	U	0.37	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.25	U	0.25	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.1	U	0.1	pg/g
R5BN1S	Clam-R5BN1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.5	U	1.5	pg/g
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.98		0.85	mg/kg
R5BN1S	Clam-R5BN1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	5.2		0.02	mg/kg
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.24	U	0.24	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.22	U	0.22	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.28	U	0.28	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.24	U	0.24	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.17	U	0.17	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.21	U	0.21	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.15	U	0.15	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.18	U	0.18	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.17	U	0.17	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.26	U	0.26	pg/g
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.17	U	0.17	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.15	U	0.15	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.11	U	0.11	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.13	U	0.13	pg/g
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	25	U	25	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	3.8	J	10	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	23		20	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	2		0.85	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	70		0.91	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.48	U	0.48	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	3.5		0.85	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.42		0.85	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	6		0.01	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	300	U	300	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	330		0.05	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.37		0.42	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	53		47	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	81		0.91	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	440	J	2000	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0063		0.017	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.5		3.5	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	3.4	U	3.4	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.29	U	0.29	pg/g
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	5.4		1	%
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	120		94	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.96	U	0.96	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.96	U	0.96	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2200		45	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.96	U	0.96	mg/kg
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.3	U	0.3	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.28	U	0.28	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.24	U	0.24	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.18	U	0.18	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.28	U	0.28	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.17	U	0.17	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.11	U	0.11	pg/g
R5BU1S	Clam-R5BU1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1	U	1	pg/g
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.96	U	0.96	mg/kg
R5BU1S	Clam-R5BU1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	4.6		0.02	mg/kg
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.26	U	0.26	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.15	U	0.15	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.24	U	0.24	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.21	U	0.21	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.12	U	0.12	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.19	U	0.19	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.11	U	0.11	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.17	U	0.17	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.14	U	0.14	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.13	U	0.13	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.13	U	0.13	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.12	U	0.12	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.1	U	0.1	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.26	U	0.26	pg/g
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.6	J	8.3	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	7.2	J	8.3	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	4.5	J	10	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	19		20	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.6		0.85	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	62		0.91	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.36	U	0.36	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.45	U	0.45	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	5		0.85	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.33		0.85	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.3		0.01	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	300	U	300	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	71	J	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	230		0.05	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.45	U	0.45	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	50		47	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	80		0.91	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0092		0.017	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.4		3.5	mg/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	2.4	U	2.4	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.2	U	0.2	pg/g
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	160	J	17	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.2		1	%
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	120		94	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.9	U	0.9	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.9	U	0.9	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2200		45	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.9	U	0.9	mg/kg
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.25	U	0.25	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.24	U	0.24	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.21	U	0.21	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.14	U	0.14	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.26	U	0.26	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.15	U	0.15	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.14	U	0.14	pg/g
R5CM1S	Clam-R5CM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.2	U	1.2	pg/g
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.9	U	0.9	mg/kg
R5CM1S	Clam-R5CM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	4.2		0.02	mg/kg
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.3	U	0.3	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.16	U	0.16	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.2	U	0.2	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.13	U	0.13	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.11	U	0.11	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.17	U	0.17	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.14	U	0.14	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.14	U	0.14	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.2	U	0.2	pg/g
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.13	U	0.13	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.13	U	0.13	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.095	U	0.095	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.13	U	0.13	pg/g
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	25	U	25	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	3	J	10	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	22		20	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.6		0.85	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	72		0.91	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.37	U	0.37	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.46	U	0.46	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	2.5		0.85	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.32		0.85	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	3.9		0.01	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	6.3	J	100	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	290		0.05	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.35		0.42	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	45		47	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	65		0.91	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0052		0.017	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.3		3.5	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	3.7	U	3.7	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.22	U	0.22	pg/g
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	1.5		1	%
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	110		94	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.93	U	0.93	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.93	U	0.93	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2500		45	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.93	U	0.93	mg/kg
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.34	U	0.34	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.2	U	0.2	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.2	U	0.2	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.14	U	0.14	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.46	U	0.46	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.16	U	0.16	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.095	U	0.095	pg/g
R6AD1S	Clam-R6AD1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.6	U	1.6	pg/g
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.93	U	0.93	mg/kg
R6AD1S	Clam-R6AD1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	3.6		0.02	mg/kg
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.33	U	0.33	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.22	U	0.22	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.27	U	0.27	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.33	U	0.33	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.2	U	0.2	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.29	U	0.29	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.18	U	0.18	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.28	U	0.28	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.23	U	0.23	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.24	U	0.24	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.34	U	0.34	pg/g
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.21	U	0.21	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.22	U	0.22	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.16	U	0.16	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.15	U	0.15	pg/g
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	5.6	J	10	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	18	J	20	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.3		0.85	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	73		0.91	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.37	U	0.37	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	230	J	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.46	U	0.46	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	1.1		0.85	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.93	U	0.93	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	3.8		0.01	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	4.9	J	100	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	180	J	0.05	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.46	U	0.46	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	50		47	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	34		0.91	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0059		0.017	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	3.7	U	3.7	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	5.8	J	1.1	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.46	U	0.46	pg/g

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.1		1	%
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	120	J	94	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.93	U	0.93	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.93	U	0.93	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2400		45	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.93	U	0.93	mg/kg
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.52	U	0.52	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.27	U	0.27	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.33	U	0.33	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.23	U	0.23	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.41	U	0.41	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.24	U	0.24	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.16	U	0.16	pg/g
R6AM1S	Clam-R6AM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.17	U	0.17	pg/g
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.23		0.85	mg/kg
R6AM1S	Clam-R6AM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	3.1		0.02	mg/kg
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.37	U	0.37	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.23	U	0.23	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.43	U	0.43	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.32	U	0.32	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.21	U	0.21	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.28	U	0.28	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.19	U	0.19	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.27	U	0.27	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.23	U	0.23	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.2	U	0.2	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.29	U	0.29	pg/g
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.22	U	0.22	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.18	U	0.18	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	1746-01-6	T	2,3,7,8-TCDD	0.17	U	0.17	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.21	U	0.21	pg/g
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8151	93-76-5	T	2,4,5-T	25	U	25	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8151	93-72-1	T	2,4,5-TP (Silvex)	25	U	25	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8151	94-75-7	T	2,4-D	25	U	25	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8151	94-82-6	T	2,4-DB	8.8	J	8.3	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	72-55-9	T	4,4'-DDE	6	J	10	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7429-90-5	T	Aluminum	33		20	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-38-2	T	Arsenic	1		0.85	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-39-3	T	Barium	96		0.91	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-43-9	T	Cadmium	0.47	U	0.47	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-47-3	T	Chromium	11		0.85	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-48-4	T	Cobalt	0.23		0.85	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-50-8	T	Copper	4.9		0.01	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8151	75-99-0	T	Dalapon	6000	U	6000	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8151	1918-00-9	T	Dicamba	60	U	60	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8151	120-36-5	T	Dichlorprop	4.1	J	100	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7439-89-6	T	Iron	260		0.05	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7439-92-1	T	Lead	0.47	U	0.47	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7439-95-4	T	Magnesium	51		47	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7439-96-5	T	Manganese	32		0.91	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	6000	U	6000	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8151	93-65-2	T	MCPP	6000	U	6000	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	7471	7439-97-6	T	Mercury	0.011		0.017	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-02-0	T	Nickel	4.8		3.5	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	3268-87-9	T	OCDD	8.6	J	1.1	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	39001-02-0	T	OCDF	0.38	U	0.38	pg/g
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8151	87-86-5	T	Pentachlorophenol	51	U	51	ug/kg
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	Q847	T	Percent Lipids	4.3		1	%
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-09-7	T	Potassium	85		94	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7782-49-2	T	Selenium	0.94	U	0.94	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-22-4	T	Silver	0.94	U	0.94	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-23-5	T	Sodium	2500		45	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-28-0	T	Thallium	0.94	U	0.94	mg/kg
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	37871-00-4	T	Total HpCDD	0.58	U	0.58	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	38998-75-3	T	Total HpCDF	0.43	U	0.43	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	34465-46-8	T	Total HxCDD	0.32	U	0.32	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	55684-94-1	T	Total HxCDF	0.23	U	0.23	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	36088-22-9	T	Total PeCDD	0.29	U	0.29	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	30402-15-4	T	Total PeCDF	0.2	U	0.2	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	41903-57-5	T	Total TCDD	0.17	U	0.17	pg/g
R6AM2S	Clam-R6AM2S	02/06/03	Field Duplicate	8290	55722-27-5	T	Total TCDF	1	U	1	pg/g
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-62-2	T	Vanadium	0.94	U	0.94	mg/kg
R6AM2S	Clam-R6AM2S	02/06/2003	Field Duplicate	6010	7440-66-6	T	Zinc	4.9		0.02	mg/kg
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.44	U	0.44	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.28	U	0.28	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.35	U	0.35	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.39	U	0.39	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.26	U	0.26	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.34	U	0.34	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.23	U	0.23	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.32	U	0.32	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.29	U	0.29	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.28	U	0.28	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.45	U	0.45	pg/g
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.27	U	0.27	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.26	U	0.26	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.2	U	0.2	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.22	U	0.22	pg/g
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	10	U	10	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	13	J	20	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.8	U	1.8	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.4		0.85	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	72		0.91	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.36	U	0.36	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.45	U	0.45	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	1.1		0.85	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.9	U	0.9	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	3.7		0.01	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	6.2	J	100	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	200	J	0.05	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.45	U	0.45	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	42		47	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	52		0.91	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	480	J	2000	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0065		0.017	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.31		3.5	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	2.8	U	2.8	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.7	U	0.7	pg/g
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3.7		1	%

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	100	J	94	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.9	U	0.9	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.9	U	0.9	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	3000		45	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.9	U	0.9	mg/kg
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.44	U	0.44	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.35	U	0.35	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.39	U	0.39	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.29	U	0.29	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.45	U	0.45	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.28	U	0.28	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.2	U	0.2	pg/g
R6AU1S	Clam-R6AU1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.6	U	1.6	pg/g
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.9	U	0.9	mg/kg
R6AU1S	Clam-R6AU1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	2.7		0.02	mg/kg
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.43	U	0.43	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.22	U	0.22	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.27	U	0.27	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.48	UJ	0.48	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.27	U	0.27	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.47	U	0.47	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.24	UJ	0.24	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.45	U	0.45	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.32	U	0.32	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.26	U	0.26	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.55	U	0.55	pg/g
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.28	U	0.28	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.27	U	0.27	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.24	U	0.24	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.17	U	0.17	pg/g
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	U	10	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	3.1	J	10	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	21	J	20	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	2	U	2	mg/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.1		0.85	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	84		0.91	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.39	U	0.39	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.49	U	0.49	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	2.8		0.85	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.98	U	0.98	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	4.8		0.01	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	180	J	0.05	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.49	U	0.49	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	50		47	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	29		0.91	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2000	U	2000	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0066	J	0.017	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	U	50	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.35		3.5	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	3.7	U	3.7	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.68	U	0.68	pg/g
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	2.6		1	%
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	71		94	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.98	U	0.98	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.98	U	0.98	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2700	J	45	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.98	U	0.98	mg/kg
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.44	U	0.44	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.27	U	0.27	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.48	U	0.48	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.32	U	0.32	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.55	U	0.55	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.33	U	0.33	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.24	U	0.24	pg/g
R6BM1S	Clam-R6BM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.2	U	1.2	pg/g
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.98	U	0.98	mg/kg
R6BM1S	Clam-R6BM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	2.7	J	0.02	mg/kg
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.24	U	0.24	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.19	U	0.19	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.24	U	0.24	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.22	U	0.22	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.15	U	0.15	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.19	U	0.19	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.13	U	0.13	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.18	U	0.18	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.17	U	0.17	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.18	U	0.18	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.25	U	0.25	pg/g
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.16	U	0.16	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.17	U	0.17	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.13	U	0.13	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.15	U	0.15	pg/g
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	5.8	J	10	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	15	J	20	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.7	U	1.7	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	0.82		0.85	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	79		0.91	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.35	U	0.35	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.43	U	0.43	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	3.1		0.85	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.15		0.85	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	3		0.01	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	190	J	0.05	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.43	U	0.43	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	33		47	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	45		0.91	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	430	J	2000	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.0051		0.017	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.84		3.5	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	2.4	U	2.4	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.5	U	0.5	pg/g
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	2.7		1	%
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	52	J	94	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.87	U	0.87	mg/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.87	U	0.87	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	3200		45	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.87	U	0.87	mg/kg
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.24	U	0.24	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.24	U	0.24	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.22	U	0.22	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.17	U	0.17	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.39	U	0.39	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.21	U	0.21	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.13	U	0.13	pg/g
R6BU1S	Clam-R6BU1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	0.86	U	0.86	pg/g
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.25		0.85	mg/kg
R6BU1S	Clam-R6BU1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	1.7		0.02	mg/kg
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.44	U	0.44	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	0.29	U	0.29	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	0.36	U	0.36	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.39	U	0.39	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	70648-26-9	T	1,2,3,4,7,8-HxCDF	0.25	U	0.25	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.35	U	0.35	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	57117-44-9	T	1,2,3,6,7,8-HxCDF	0.23	U	0.23	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.33	U	0.33	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	72918-21-9	T	1,2,3,7,8,9-HxCDF	0.28	U	0.28	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	0.24	U	0.24	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.38	U	0.38	pg/g
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	120-82-1	T	1,2,4-Trichlorobenzene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	95-50-1	T	1,2-Dichlorobenzene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	541-73-1	T	1,3-Dichlorobenzene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	106-46-7	T	1,4-Dichlorobenzene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	60851-34-5	T	2,3,4,6,7,8-HxCDF	0.27	U	0.27	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	57117-31-4	T	2,3,4,7,8-PeCDF	0.23	U	0.23	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	1746-01-6	T	2,3,7,8-TCDD	0.19	U	0.19	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	0.25	U	0.25	pg/g
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8151	93-76-5	T	2,4,5-T	8.3	U	8.3	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8151	93-72-1	T	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	95-95-4	T	2,4,5-Trichlorophenol	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	88-06-2	T	2,4,6-Trichlorophenol	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8151	94-75-7	T	2,4-D	8.3	U	8.3	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8151	94-82-6	T	2,4-DB	8.3	U	8.3	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	120-83-2	T	2,4-Dichlorophenol	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	105-67-9	T	2,4-Dimethylphenol	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	51-28-5	T	2,4-Dinitrophenol	5100	U	5100	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	121-14-2	T	2,4-Dinitrotoluene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	606-20-2	T	2,6-Dinitrotoluene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	91-58-7	T	2-Chloronaphthalene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	95-57-8	T	2-Chlorophenol	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	91-57-6	T	2-Methylnaphthalene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	95-48-7	T	2-Methylphenol (o-Cresol)	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	88-74-4	T	2-Nitroaniline	5100	U	5100	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	88-75-5	T	2-Nitrophenol	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	91-94-1	T	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	99-09-2	T	3-Nitroaniline	5100	U	5100	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	72-54-8	T	4,4'-DDD	10	UJ	10	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	72-55-9	T	4,4'-DDE	10	U	10	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	50-29-3	T	4,4'-DDT	10	U	10	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	534-52-1	T	4,6-Dinitro-2-methylphenol	5100	U	5100	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	101-55-3	T	4-Bromophenyl Phenyl Ether	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	59-50-7	T	4-Chloro-3-methylphenol	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	7005-72-3	T	4-Chlorophenyl Phenyl Ether	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	100-02-7	T	4-Nitrophenol	5100	U	5100	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	83-32-9	T	Acenaphthene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	208-96-8	T	Acenaphthylene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	309-00-2	T	Aldrin	5	U	5	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	319-84-6	T	alpha-BHC	5	U	5	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	5103-71-9	T	alpha-Chlordane	5	U	5	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7429-90-5	T	Aluminum	17	J	20	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	120-12-7	T	Anthracene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-36-0	T	Antimony	1.9	U	1.9	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-38-2	T	Arsenic	1.8		0.85	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-39-3	T	Barium	62		0.91	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	56-55-3	T	Benzo(a)anthracene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	50-32-8	T	Benzo(a)pyrene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	205-99-2	T	Benzo(b)fluoranthene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	191-24-2	T	Benzo(g,h,i)perylene	990	U	990	ug/kg

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	207-08-9	T	Benzo(k)fluoranthene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	85-68-7	T	Benzyl Butyl Phthalate	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-41-7	T	Beryllium	0.38	U	0.38	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	319-85-7	T	beta-BHC	5	U	5	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	111-91-1	T	bis(2-Chloroethoxy)methane	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	111-44-4	T	bis(2-Chloroethyl)ether	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	117-81-7	T	bis(2-Ethylhexyl)phthalate	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-43-9	T	Cadmium	0.48	U	0.48	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	86-74-8	T	Carbazole	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-47-3	T	Chromium	4.1		0.85	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	218-01-9	T	Chrysene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-48-4	T	Cobalt	0.32		0.85	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-50-8	T	Copper	5.6		0.01	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8151	75-99-0	T	Dalapon	2000	U	2000	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	680	2051-24-3	T	Decachlorobiphenyl	50	U	50	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	319-86-8	T	delta-BHC	5	U	5	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	53-70-3	T	Dibenzo(a,h)anthracene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	132-64-9	T	Dibenzofuran	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8151	1918-00-9	T	Dicamba	20	U	20	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	680	C-DICHLOROBI	T	Dichlorobiphenyl	10	U	10	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8151	120-36-5	T	Dichlorprop	100	U	100	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	60-57-1	T	Dieldrin	10	U	10	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	84-66-2	T	Diethyl Phthalate	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	131-11-3	T	Dimethyl Phthalate	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	84-74-2	T	Di-n-butylphthalate	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	117-84-0	T	Di-n-octylphthalate	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	88-85-7	T	Dinoseb	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	959-98-8	T	Endosulfan I	5	U	5	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	33213-65-9	T	Endosulfan II	10	U	10	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	1031-07-8	T	Endosulfan Sulfate	10	U	10	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	72-20-8	T	Endrin	10	U	10	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	7421-93-4	T	Endrin Aldehyde	10	U	10	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	53494-70-5	T	Endrin Ketone	10	U	10	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	206-44-0	T	Fluoranthene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	86-73-7	T	Fluorene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	58-89-9	T	gamma-BHC (Lindane)	5	U	5	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	5103-74-2	T	gamma-Chlordane	5	U	5	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	76-44-8	T	Heptachlor	5	U	5	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	1024-57-3	T	Heptachlor Epoxide	5	U	5	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	680	C-HEPTACHLOR	T	Heptachlorobiphenyl	30	U	30	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	118-74-1	T	Hexachlorobenzene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	680	C-HEXACHLORO	T	Hexachlorobiphenyl	20	U	20	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	87-68-3	T	Hexachlorobutadiene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	77-47-4	T	Hexachlorocyclopentadiene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	67-72-1	T	Hexachloroethane	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	193-39-5	T	Indeno(1,2,3-cd)pyrene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7439-89-6	T	Iron	240	J	0.05	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	78-59-1	T	Isophorone	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7439-92-1	T	Lead	0.48	U	0.48	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7439-95-4	T	Magnesium	69		47	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7439-96-5	T	Manganese	71		0.91	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8151	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	420	J	2000	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8151	93-65-2	T	MCPP	2000	U	2000	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	7471	7439-97-6	T	Mercury	0.018	U	0.018	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	72-43-5	T	Methoxychlor	50	UJ	50	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	680	C-MONOCHLORO	T	Monochlorobiphenyl	10	U	10	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	91-20-3	T	Naphthalene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-02-0	T	Nickel	0.48		3.5	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	98-95-3	T	Nitrobenzene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	621-64-7	T	N-Nitroso-di-n-propylamine	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	86-30-6	T	N-Nitrosodiphenylamine	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	680	C-NONACHLORO	T	Nonachlorobiphenyl	50	U	50	ug/kg
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	3268-87-9	T	OCDD	4.5	U	4.5	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	39001-02-0	T	OCDF	0.53	U	0.53	pg/g
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	680	C-OCTA-BIPHE	T	Octachlorobiphenyl	30	U	30	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	106-47-8	T	P-Chloroaniline	2000	U	2000	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	680	C-PENTBIPHEN	T	Pentachlorobiphenyl	20	U	20	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	87-86-5	T	Pentachlorophenol	5100	U	5100	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8151	87-86-5	T	Pentachlorophenol	17	U	17	ug/kg
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	Q847	T	Percent Lipids	3		1	%
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	85-01-8	T	Phenanthrene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	108-95-2	T	Phenol	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	100-01-6	T	P-Nitroaniline	5100	U	5100	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-09-7	T	Potassium	160	J	94	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8270	129-00-0	T	Pyrene	990	U	990	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7782-49-2	T	Selenium	0.95	U	0.95	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-22-4	T	Silver	0.95	U	0.95	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-23-5	T	Sodium	2000		45	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	680	C-TETRACHLOR	T	Tetrachlorobiphenyl	20	U	20	ug/kg

Appendix II-G
Results of Chemical Analysis of Clams Tissue from Sediment Bioaccumulation Tests

Location	Field Sample ID	Sample Date	Sample Type	Method	CAS	Total or Dissolved	Analyte	Result	Qualifier	Reporting Limit	Units
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-28-0	T	Thallium	0.95	U	0.95	mg/kg
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	37871-00-4	T	Total HpCDD	0.44	U	0.44	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	38998-75-3	T	Total HpCDF	0.36	U	0.36	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	34465-46-8	T	Total HxCDD	0.39	U	0.39	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	55684-94-1	T	Total HxCDF	0.28	U	0.28	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	36088-22-9	T	Total PeCDD	0.38	U	0.38	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	30402-15-4	T	Total PeCDF	0.38	U	0.38	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	41903-57-5	T	Total TCDD	0.47	U	0.47	pg/g
R6CM1S	Clam-R6CM1S	02/06/03	Field Sample	8290	55722-27-5	T	Total TCDF	1.7	U	1.7	pg/g
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	8081	8001-35-2	T	Toxaphene	500	U	500	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	680	C-TRICHLOROB	T	Trichlorobiphenyl	10	U	10	ug/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-62-2	T	Vanadium	0.35		0.85	mg/kg
R6CM1S	Clam-R6CM1S	02/06/2003	Field Sample	6010	7440-66-6	T	Zinc	6		0.02	mg/kg

Appendix II-H

Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	% Lipids	% Lipids	% Lipids	14			%
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	11.3		0.1	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.34	UJ	0.1	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	4.3		0.09	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.05	UJ	0.05	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.07	UJ	0.07	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.58	J	0.06	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.71	J	0.04	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	2	J	0.06	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.34	J	0.04	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.78	J	0.06	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.05	UJ	0.05	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	40321-76-4	1,2,3,7,8-PeCDD	1.2	J	0.05	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.04	UJ	0.04	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.86	J	0.04	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	57117-31-4	2,3,4,7,8-PeCDF	1	J	0.04	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	1746-01-6	2,3,7,8-TCDD	0.96		0.05	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	51207-31-9	2,3,7,8-TCDF	0.53		0.04	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	37871-00-4	Total HpCDD	4.6		0.09	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	38998-75-3	Total HpCDF	5.3	J	0.06	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	34465-46-8	Total HxCDD	3.9	J	0.06	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	55684-94-1	Total HxCDF	42.1	J	0.04	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	36088-22-9	Total PeCDD	3.2	J	0.05	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	30402-15-4	Total PeCDF	93.9	J	0.04	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	41903-57-5	Total TCDD	1.4	J	0.05	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	SW8290	55722-27-5	Total TCDF	216	J	0.04	pg/g
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8151	1918-00-9	Dicamba	20	U	20	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8151	88-85-7	Dinoseb	100	U	100	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	72-54-8	4,4'-DDD	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	72-55-9	4,4'-DDE	16	J	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	50-29-3	4,4'-DDT	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	309-00-2	Aldrin	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	319-84-6	alpha-BHC	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	5103-71-9	alpha-Chlordane	7.7	J	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	319-85-7	beta-BHC	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	319-86-8	delta-BHC	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	60-57-1	Dieldrin	19	J	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	959-98-8	Endosulfan I	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	33213-65-9	Endosulfan II	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	1031-07-8	Endosulfan sulfate	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	72-20-8	Endrin	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	7421-93-4	Endrin aldehyde	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	53494-70-5	Endrin ketone	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	58-89-9	gamma-BHC (Lindane)	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	5103-74-2	gamma-Chlordane	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	76-44-8	Heptachlor	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	1024-57-3	Heptachlor epoxide	50	U	50	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	72-43-5	Methoxychlor	200	U	200	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8081A	8001-35-2	Toxaphene	1700	U	1700	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	95-48-7	2-Methylphenol (o-Cresol)	340	J	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	120-12-7	Anthracene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	86-74-8	Carbazole	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	218-01-9	Chrysene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	86-73-7	Fluorene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	78-59-1	Isophorone	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	108-95-2	Phenol	510	U	510	ug/kg
DDA Channel Catfish-Comp#1	2-Nov-00	Composite	Reference	8270C	129-00-0	Pyrene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	% Lipids	% Lipids	% Lipids	3			%
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	119		0.3	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	2.7	J	0.2	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	4.3		0.2	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.1	UJ	0.1	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.2	UJ	0.2	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.1	UJ	0.1	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.37	U	0.09	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.37	J	0.1	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.08	UJ	0.08	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.26	J	0.1	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.1	UJ	0.1	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.24	J	0.1	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.09	UJ	0.09	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.18	J	0.09	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.21	J	0.09	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	1746-01-6	2,3,7,8-TCDD	0.34	J	0.09	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	51207-31-9	2,3,7,8-TCDF	1		0.08	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	37871-00-4	Total HpCDD	8.5		0.2	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	38998-75-3	Total HpCDF	3.1	J	0.1	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	34465-46-8	Total HxCDD	1.3	UJ	0.1	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	55684-94-1	Total HxCDF	12.1	J	0.09	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	36088-22-9	Total PeCDD	2.6	J	0.1	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	30402-15-4	Total PeCDF	24.7	J	0.09	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	41903-57-5	Total TCDD	0.61	J	0.09	pg/g
DDA Comp Shad	25-Oct-00	Composite	Reference	SW8290	55722-27-5	Total TCDF	30	J	0.08	pg/g

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
DDA Comp Shad	25-Oct-00	Composite	Reference	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8151	93-72-1	2,4,5-TP (Silvex)	3.9	J	8.3	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8151	1918-00-9	Dicamba	20	U	20	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8151	88-85-7	Dinoseb	100	U	100	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	72-54-8	4,4'-DDD	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	72-55-9	4,4'-DDE	5.2	J	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	50-29-3	4,4'-DDT	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	309-00-2	Aldrin	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	319-84-6	alpha-BHC	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	5103-71-9	alpha-Chlordane	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	319-85-7	beta-BHC	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	319-86-8	delta-BHC	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	60-57-1	Dieldrin	14	J	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	959-98-8	Endosulfan I	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	33213-65-9	Endosulfan II	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	1031-07-8	Endosulfan sulfate	12	J	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	72-20-8	Endrin	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	7421-93-4	Endrin aldehyde	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	53494-70-5	Endrin ketone	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	58-89-9	gamma-BHC (Lindane)	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	5103-74-2	gamma-Chlordane	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	76-44-8	Heptachlor	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	1024-57-3	Heptachlor epoxide	25	UJ	25	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	72-43-5	Methoxychlor	100	UJ	100	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8081A	8001-35-2	Toxaphene	850	UJ	850	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	95-48-7	2-Methylphenol (o-Cresol)	320	J	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	120-12-7	Anthracene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	86-74-8	Carbazole	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	218-01-9	Chrysene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	86-73-7	Fluorene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	78-59-1	Isophorone	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	108-95-2	Phenol	510	U	510	ug/kg
DDA Comp Shad	25-Oct-00	Composite	Reference	8270C	129-00-0	Pyrene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	% Lipids	% Lipids	% Lipids	2			%
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	2.8	J	0.2	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.14	U	0.1	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.71	J	0.1	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.07	UJ	0.07	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.1	UJ	0.1	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.12	J	0.09	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.19	U	0.06	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.31	J	0.09	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.06	UJ	0.06	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.08	UJ	0.09	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.08	UJ	0.08	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.18	J	0.09	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.07	UJ	0.07	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.06	UJ	0.06	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.22	J	0.07	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	1746-01-6	2,3,7,8-TCDD	0.3	J	0.07	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	51207-31-9	2,3,7,8-TCDF	0.99		0.06	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	37871-00-4	Total HpCDD	0.81		0.1	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	38998-75-3	Total HpCDF	0.8	J	0.08	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	34465-46-8	Total HxCDD	0.51	UJ	0.09	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	55684-94-1	Total HxCDF	4.6	J	0.06	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	36088-22-9	Total PeCDD	1.9	J	0.09	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	30402-15-4	Total PeCDF	12.2	J	0.07	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	41903-57-5	Total TCDD	0.72	J	0.07	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	SW8290	55722-27-5	Total TCDF	22.5	J	0.06	pg/g
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8151	1918-00-9	Dicamba	20	U	20	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8151	88-85-7	Dinoseb	100	U	100	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	72-55-9	4,4'-DDE	7.3	J	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	309-00-2	Aldrin	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	60-57-1	Dieldrin	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	72-20-8	Endrin	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	120-12-7	Anthracene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	86-74-8	Carbazole	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	218-01-9	Chrysene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	86-73-7	Fluorene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	78-59-1	Isophorone	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	91-20-3	Naphthalene	510	U	510	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	108-95-2	Phenol	510	U	510	ug/kg
DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference	8270C	129-00-0	Pyrene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	% Lipids	% Lipids	% Lipids	3			%
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	4.5	J	0.1	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.1	U	0.1	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.62	J	0.09	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.05	UJ	0.05	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.07	UJ	0.07	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.06	UJ	0.06	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.14	U	0.04	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.34	J	0.06	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.04	UJ	0.04	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.2	J	0.06	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.05	UJ	0.05	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.05	UJ	0.05	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.04	UJ	0.04	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.2	J	0.04	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.04	UJ	0.04	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	1746-01-6	2,3,7,8-TCDD	0.05	UJ	0.05	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	51207-31-9	2,3,7,8-TCDF	0.33	J	0.04	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	37871-00-4	Total HpCDD	0.75		0.09	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	38998-75-3	Total HpCDF	8.5	J	0.06	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	34465-46-8	Total HxCDD	0.96	UJ	0.06	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	55684-94-1	Total HxCDF	38.5	J	0.04	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	36088-22-9	Total PeCDD	1.1	J	0.05	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	30402-15-4	Total PeCDF	62	J	0.04	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	41903-57-5	Total TCDD	0.13	UJ	0.05	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	SW8290	55722-27-5	Total TCDF	128	J	0.04	pg/g
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8151	93-72-1	2,4,5-TP (Silvex)	6.9	J	8.3	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8151	1918-00-9	Dicamba	20	U	20	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8151	88-85-7	Dinoseb	100	U	100	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	72-54-8	4,4'-DDD	12	J	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	72-55-9	4,4'-DDE	19	J	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	309-00-2	Aldrin	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	60-57-1	Dieldrin	8.8	J	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	72-20-8	Endrin	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	7421-93-4	Endrin aldehyde	4.9	J	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	5103-74-2	gamma-Chlordane	3.5	J	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	95-48-7	2-Methylphenol (o-Cresol)	290	J	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	120-12-7	Anthracene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	86-74-8	Carbazole	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	218-01-9	Chrysene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	86-73-7	Fluorene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	78-59-1	Isophorone	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	108-95-2	Phenol	510	U	510	ug/kg
DDA Drum-Comp#1	27-Oct-00	Composite	Reference	8270C	129-00-0	Pyrene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	% Lipids	% Lipids	% Lipids	1			%
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	2.2	J	0.1	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.19	UJ	0.1	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.39	U	0.09	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.05	UJ	0.05	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.06	UJ	0.06	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.06	UJ	0.06	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.12	U	0.04	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.19	J	0.06	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.04	UJ	0.04	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.06	UJ	0.06	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.05	UJ	0.05	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.14	J	0.05	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.04	UJ	0.04	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.04	UJ	0.04	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.19	J	0.04	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	1746-01-6	2,3,7,8-TCDD	0.1	U	0.04	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	51207-31-9	2,3,7,8-TCDF	0.44	J	0.04	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	37871-00-4	Total HpCDD	0.55	U	0.09	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	38998-75-3	Total HpCDF	0.33	J	0.05	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	34465-46-8	Total HxCDD	0.19	U	0.06	pg/g

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	55684-94-1	Total HxCDF	1.4	J	0.04	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	36088-22-9	Total PeCDD	1.5	J	0.05	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	30402-15-4	Total PeCDF	2.8	J	0.04	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	41903-57-5	Total TCDD	2.1		0.04	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	SW8290	55722-27-5	Total TCDF	7.1	J	0.04	pg/g
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8151	1918-00-9	Dicamba	20	U	20	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8151	88-85-7	Dinoseb	100	U	100	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	72-55-9	4,4'-DDE	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	309-00-2	Aldrin	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	60-57-1	Dieldrin	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	72-20-8	Endrin	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	120-12-7	Anthracene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	86-74-8	Carbazole	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	218-01-9	Chrysene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	86-73-7	Fluorene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	78-59-1	Isophorone	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	108-95-2	Phenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#1	1-Nov-00	Composite	Site	8270C	129-00-0	Pyrene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	% Lipids	% Lipids	% Lipids	2			%
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	2.8	J	0.1	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.29	U	0.1	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.79	J	0.09	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.05	UJ	0.05	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.07	UJ	0.07	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.09	U	0.06	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.21	U	0.04	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.26	J	0.06	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.04	UJ	0.04	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.14	J	0.06	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.05	UJ	0.05	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.19	J	0.05	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.04	UJ	0.04	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.09	U	0.04	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.19	J	0.04	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	1746-01-6	2,3,7,8-TCDD	0.19	J	0.05	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	51207-31-9	2,3,7,8-TCDF	0.72		0.04	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	37871-00-4	Total HpCDD	0.89	J	0.09	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	38998-75-3	Total HpCDF	0.9	J	0.06	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	34465-46-8	Total HxCDD	1	UJ	0.06	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	55684-94-1	Total HxCDF	4.8	J	0.04	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	36088-22-9	Total PeCDD	0.96	J	0.05	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	30402-15-4	Total PeCDF	13.4	J	0.04	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	41903-57-5	Total TCDD	0.56	J	0.05	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	SW8290	55722-27-5	Total TCDF	23.7	J	0.04	pg/g
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8151	1918-00-9	Dicamba	20	U	20	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8151	88-85-7	Dinoseb	100	U	100	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	72-55-9	4,4'-DDE	7.6	J	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	309-00-2	Aldrin	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	60-57-1	Dieldrin	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	72-20-8	Endrin	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	72-43-5	Methoxychlor	44	J	25	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	120-12-7	Anthracene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	86-74-8	Carbazole	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	218-01-9	Chrysene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	86-73-7	Fluorene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	78-59-1	Isophorone	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	108-95-2	Phenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#2	1-Nov-00	Composite	Site	8270C	129-00-0	Pyrene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	% Lipids	% Lipids	% Lipids	2			%
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	5.8	J	0.1	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.4	UJ	0.08	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.87	J	0.07	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.05	UJ	0.05	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.06	UJ	0.06	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.08	U	0.06	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.13	U	0.04	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.26	J	0.05	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.05	UJ	0.03	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.1	U	0.05	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.05	UJ	0.05	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.14	J	0.05	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.04	UJ	0.04	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.09	U	0.04	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.24	J	0.04	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	1746-01-6	2,3,7,8-TCDD	0.26	J	0.05	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	51207-31-9	2,3,7,8-TCDF	0.65		0.04	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	37871-00-4	Total HpCDD	1.1		0.07	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	38998-75-3	Total HpCDF	0.72	J	0.05	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	34465-46-8	Total HxCDD	0.84	UJ	0.05	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	55684-94-1	Total HxCDF	3.8	J	0.04	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	36088-22-9	Total PeCDD	0.78	J	0.05	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	30402-15-4	Total PeCDF	9.1	J	0.04	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	41903-57-5	Total TCDD	0.87		0.05	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	SW8290	55722-27-5	Total TCDF	18.1	J	0.04	pg/g
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8151	93-76-5	2,4,5-T	4.8	J	8.3	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8151	1918-00-9	Dicamba	20	U	20	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8151	88-85-7	Dinoseb	100	U	100	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	72-55-9	4,4'-DDE	8.2	J	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	309-00-2	Aldrin	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	60-57-1	Dieldrin	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	72-20-8	Endrin	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	120-12-7	Anthracene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	86-74-8	Carbazole	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	218-01-9	Chrysene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	86-73-7	Fluorene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	78-59-1	Isophorone	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	108-95-2	Phenol	510	U	510	ug/kg
PDA Buffalo Fillet Comp#3	1-Nov-00	Composite	Site	8270C	129-00-0	Pyrene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	% Lipids	% Lipids	% Lipids	6			%
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	7.7	J	0.1	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.21	UJ	0.08	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	3	J	0.07	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.04	UJ	0.04	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.05	UJ	0.05	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.29	J	0.05	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.29	UJ	0.03	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.1	J	0.05	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.11	UJ	0.03	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.37	J	0.04	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.04	UJ	0.04	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.47	J	0.04	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.03	UJ	0.03	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.13	UJ	0.03	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.52	J	0.03	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	1746-01-6	2,3,7,8-TCDD	0.6		0.04	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	51207-31-9	2,3,7,8-TCDF	0.35	J	0.03	pg/g

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	37871-00-4	Total HpCDD	3.2	J	0.07	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	38998-75-3	Total HpCDF	0.83	J	0.05	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	34465-46-8	Total HxCDD	2.2	J	0.05	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	55684-94-1	Total HxCDF	8.3	J	0.03	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	36088-22-9	Total PeCDD	1.8	J	0.04	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	30402-15-4	Total PeCDF	21.5	J	0.03	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	41903-57-5	Total TCDD	0.87	J	0.04	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	SW8290	55722-27-5	Total TCDF	45.9	J	0.03	pg/g
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8151	93-76-5	2,4,5-T	6.3	J	8.3	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8151	93-72-1	2,4,5-TP (Silvex)	3.9	J	8.3	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8151	1918-00-9	Dicamba	20	U	20	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8151	88-85-7	Dinoseb	100	U	100	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2700	J	2000	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	72-55-9	4,4'-DDE	15	J	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	309-00-2	Aldrin	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	60-57-1	Dieldrin	7.2	J	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	72-20-8	Endrin	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	120-12-7	Anthracene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	86-74-8	Carbazole	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	218-01-9	Chrysene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	86-73-7	Fluorene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	78-59-1	Isophorone	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	108-95-2	Phenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#1	2-Nov-00	Composite	Site	8270C	129-00-0	Pyrene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	% Lipids	% Lipids	% Lipids	10			%
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	9		0.2	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.23	U	0.2	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	4.1		0.1	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.08	UJ	0.08	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.1	UJ	0.1	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.3	J	0.09	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.43	J	0.06	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.2	J	0.09	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.17	J	0.06	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.58	J	0.09	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.08	UJ	0.08	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.64	J	0.08	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.07	UJ	0.07	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.22	J	0.07	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.64	J	0.07	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	1746-01-6	2,3,7,8-TCDD	0.83		0.08	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	51207-31-9	2,3,7,8-TCDF	1.2		0.07	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	37871-00-4	Total HpCDD	4.3		0.1	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	38998-75-3	Total HpCDF	0.09	UJ	0.09	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	34465-46-8	Total HxCDD	2.6	J	0.09	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	55684-94-1	Total HxCDF	7.7	J	0.07	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	36088-22-9	Total PeCDD	3.3	J	0.08	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	30402-15-4	Total PeCDF	31.4	J	0.07	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	41903-57-5	Total TCDD	1.1	J	0.08	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	SW8290	55722-27-5	Total TCDF	60.6	J	0.07	pg/g
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8151	1918-00-9	Dicamba	20	U	20	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8151	88-85-7	Dinoseb	100	U	100	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	8600	J	2000	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8151	87-86-5	Pentachlorophenol	24	U	17	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	72-55-9	4,4'-DDE	20	J	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	309-00-2	Aldrin	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	5103-71-9	alpha-Chlordane	3.8	J	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	60-57-1	Dieldrin	9.5	J	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	72-20-8	Endrin	15	J	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	7421-93-4	Endrin aldehyde	6.4	J	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	1024-57-3	Heptachlor epoxide	3.4	J	25	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	95-50-1	1,2-Dichlorobenzene	210	J	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	120-83-2	2,4-Dichlorophenol	190	J	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	95-48-7	2-Methylphenol (o-Cresol)	180	J	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	120-12-7	Anthracene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	86-74-8	Carbazole	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	218-01-9	Chrysene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	86-73-7	Fluorene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	78-59-1	Isophorone	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	108-95-2	Phenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site	8270C	129-00-0	Pyrene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	% Lipids	% Lipids	% Lipids	7			%
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	10.6		0.08	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.23	U	0.06	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	4		0.05	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.03	UJ	0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.04	UJ	0.04	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.3	J	0.04	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.28	U	0.02	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.1	J	0.04	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.1	UJ	0.02	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.56	J	0.04	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.03	UJ	0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.42	J	0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.03	UJ	0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.16	J	0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.35	J	0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	1746-01-6	2,3,7,8-TCDD	0.37	J	0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	51207-31-9	2,3,7,8-TCDF	0.54		0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	37871-00-4	Total HpCDD	4.2		0.05	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	38998-75-3	Total HpCDF	2.1	J	0.04	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	34465-46-8	Total HxCDD	2.4	J	0.04	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	55684-94-1	Total HxCDF	15.3	J	0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	36088-22-9	Total PeCDD	1.9	J	0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	30402-15-4	Total PeCDF	41.8	J	0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	41903-57-5	Total TCDD	0.68	J	0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	SW8290	55722-27-5	Total TCDF	105	J	0.03	pg/g
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8151	1918-00-9	Dicamba	20	U	20	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8151	88-85-7	Dinoseb	100	U	100	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	72-55-9	4,4'-DDE	26		25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	309-00-2	Aldrin	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	60-57-1	Dieldrin	11	J	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	72-20-8	Endrin	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	5103-74-2	gamma-Chlordane	3.4	J	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	120-12-7	Anthracene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	86-74-8	Carbazole	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	218-01-9	Chrysene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	86-73-7	Fluorene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	78-59-1	Isophorone	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	108-95-2	Phenol	510	U	510	ug/kg
PDA Channel Catfish-Comp#3	3-Nov-00	Composite	Site	8270C	129-00-0	Pyrene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	% Lipids	% Lipids	% Lipids	17			%
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	6.8		0.1	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.72	U	0.1	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	1.3	J	0.08	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.05	UJ	0.05	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.07	UJ	0.07	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.1	U	0.07	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.25	U	0.04	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.45	J	0.07	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.07	U	0.04	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.24	J	0.07	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.06	UJ	0.06	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.32	J	0.06	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.13	UJ	0.04	pg/g

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.12	U	0.05	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.19	J	0.04	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	1746-01-6	2,3,7,8-TCDD	0.28	J	0.04	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	51207-31-9	2,3,7,8-TCDF	0.92		0.04	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	37871-00-4	Total HpCDD	1.6		0.08	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	38998-75-3	Total HpCDF	0.5	J	0.06	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	34465-46-8	Total HxCDD	1.3	UJ	0.07	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	55684-94-1	Total HxCDF	5	J	0.05	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	36088-22-9	Total PeCDD	2.5	J	0.06	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	30402-15-4	Total PeCDF	29.9	J	0.04	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	41903-57-5	Total TCDD	2.8	J	0.04	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	SW8290	55722-27-5	Total TCDF	35.1	J	0.04	pg/g
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8151	93-72-1	2,4,5-TP (Silvex)	4.9	J	8.3	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8151	1918-00-9	Dicamba	20	U	20	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8151	88-85-7	Dinoseb	100	U	100	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	3400	J	2000	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	72-54-8	4,4'-DDD	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	72-55-9	4,4'-DDE	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	50-29-3	4,4'-DDT	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	309-00-2	Aldrin	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	319-84-6	alpha-BHC	2.6	J	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	5103-71-9	alpha-Chlordane	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	319-85-7	beta-BHC	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	319-86-8	delta-BHC	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	60-57-1	Dieldrin	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	959-98-8	Endosulfan I	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	33213-65-9	Endosulfan II	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	1031-07-8	Endosulfan sulfate	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	72-20-8	Endrin	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	7421-93-4	Endrin aldehyde	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	53494-70-5	Endrin ketone	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	58-89-9	gamma-BHC (Lindane)	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	5103-74-2	gamma-Chlordane	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	76-44-8	Heptachlor	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	1024-57-3	Heptachlor epoxide	25	UJ	25	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	72-43-5	Methoxychlor	100	UJ	100	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8081A	8001-35-2	Toxaphene	850	UJ	850	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	95-50-1	1,2-Dichlorobenzene	190	J	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	120-83-2	2,4-Dichlorophenol	180	J	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	120-12-7	Anthracene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	86-74-8	Carbazole	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	218-01-9	Chrysene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	86-73-7	Fluorene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	78-59-1	Isophorone	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	108-95-2	Phenol	510	U	510	ug/kg
PDA Comp#1 Shad	27-Oct-00	Composite	Site	8270C	129-00-0	Pyrene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	% Lipids	% Lipids	% Lipids	15			%
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	15.1		0.2	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.25	U	0.1	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	2	J	0.1	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.07	UJ	0.07	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.09	UJ	0.09	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.08	UJ	0.08	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.84	J	0.05	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.82	J	0.08	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.05	UJ	0.05	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.39	J	0.08	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.07	UJ	0.07	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.46	J	0.07	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.06	UJ	0.06	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.48	J	0.06	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.41	J	0.06	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	1746-01-6	2,3,7,8-TCDD	2.4		0.06	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	51207-31-9	2,3,7,8-TCDF	1.9		0.05	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	37871-00-4	Total HpCDD	2.6		0.1	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	38998-75-3	Total HpCDF	13.6	J	0.08	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	34465-46-8	Total HxCDD	1.7	J	0.08	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	55684-94-1	Total HxCDF	81.6	J	0.06	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	36088-22-9	Total PeCDD	3.4	J	0.07	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	30402-15-4	Total PeCDF	124	J	0.06	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	41903-57-5	Total TCDD	3.3	J	0.06	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	SW8290	55722-27-5	Total TCDF	187	J	0.05	pg/g
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8151	93-72-1	2,4,5-TP (Silvex)	8.7		8.3	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8151	1918-00-9	Dicamba	20	U	20	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8151	88-85-7	Dinoseb	100	U	100	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Comp#2 Shad	27-Oct-00	Composite	Site	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	72-55-9	4,4'-DDE	5.4	J	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	309-00-2	Aldrin	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	60-57-1	Dieldrin	4.3	J	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	72-20-8	Endrin	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	95-50-1	1,2-Dichlorobenzene	240	J	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	120-83-2	2,4-Dichlorophenol	140	J	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	120-12-7	Anthracene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	86-74-8	Carbazole	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	218-01-9	Chrysene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	86-73-7	Fluorene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	78-59-1	Isophorone	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	108-95-2	Phenol	510	U	510	ug/kg
PDA Comp#2 Shad	27-Oct-00	Composite	Site	8270C	129-00-0	Pyrene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	% Lipids	% Lipids	% Lipids	13			%
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	189	J	0.04	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	4.3	J	0.03	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	7.1		0.03	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	1	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.03	UJ	0.03	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.18	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.46	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.1	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.19	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.54	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.02	UJ	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.51	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.43	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.3	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.55	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	1746-01-6	2,3,7,8-TCDD	0.57		0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	51207-31-9	2,3,7,8-TCDF	5.7		0.01	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	37871-00-4	Total HpCDD	13.5		0.03	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	38998-75-3	Total HpCDF	6.1	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	34465-46-8	Total HxCDD	3.3	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	55684-94-1	Total HxCDF	16	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	36088-22-9	Total PeCDD	3.1	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	30402-15-4	Total PeCDF	33.1	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	41903-57-5	Total TCDD	5.9	J	0.02	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	SW8290	55722-27-5	Total TCDF	72.7	J	0.01	pg/g
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8151	1918-00-9	Dicamba	20	U	20	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8151	88-85-7	Dinoseb	100	U	100	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	72-55-9	4,4'-DDE	5.8	J	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	309-00-2	Aldrin	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	60-57-1	Dieldrin	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	72-20-8	Endrin	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	95-50-1	1,2-Dichlorobenzene	140	J	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	106-46-7	1,4-Dichlorobenzene	130	J	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	95-48-7	2-Methylphenol (o-Cresol)	140	J	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	120-12-7	Anthracene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	86-74-8	Carbazole	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	218-01-9	Chrysene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	86-73-7	Fluorene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	78-59-1	Isophorone	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	108-95-2	Phenol	510	U	510	ug/kg
PDA Comp#3 Shad	27-Oct-00	Composite	Site	8270C	129-00-0	Pyrene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	% Lipids	% Lipids	% Lipids	3			%
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	16.5		0.2	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	1.5	U	0.2	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	2.5	J	0.1	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.08	UJ	0.08	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.1	UJ	0.1	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.1	UJ	0.1	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.45	J	0.06	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.84	J	0.1	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.22	J	0.06	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.38	J	0.1	pg/g

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.08	UJ	0.08	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.09	UJ	0.09	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.07	UJ	0.07	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.24	J	0.07	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.07	UJ	0.07	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	1746-01-6	2,3,7,8-TCDD	0.14	UJ	0.08	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	51207-31-9	2,3,7,8-TCDF	0.44	J	0.06	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	37871-00-4	Total HpCDD	3.6		0.1	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	38998-75-3	Total HpCDF	6.1	J	0.09	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	34465-46-8	Total HxCDD	2.3	J	0.1	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	55684-94-1	Total HxCDF	27	J	0.07	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	36088-22-9	Total PeCDD	1.9	J	0.09	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	30402-15-4	Total PeCDF	40.6	J	0.07	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	41903-57-5	Total TCDD	0.38	UJ	0.08	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	SW8290	55722-27-5	Total TCDF	64.6	J	0.06	pg/g
PDA Drum Comp#1	2-Nov-00	Composite	Site	8151	93-76-5	2,4,5-T	13	J	8.3	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8151	93-72-1	2,4,5-TP (Silvex)	6.4	J	8.3	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8151	1918-00-9	Dicamba	20	U	20	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8151	88-85-7	Dinoseb	100	U	100	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	72-54-8	4,4'-DDD	6.6	J	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	72-55-9	4,4'-DDE	13	J	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	309-00-2	Aldrin	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	60-57-1	Dieldrin	6.7	J	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	72-20-8	Endrin	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	95-48-7	2-Methylphenol (o-Cresol)	180	J	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	120-12-7	Anthracene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	86-74-8	Carbazole	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	218-01-9	Chrysene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	86-73-7	Fluorene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	78-59-1	Isophorone	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	108-95-2	Phenol	510	U	510	ug/kg
PDA Drum Comp#1	2-Nov-00	Composite	Site	8270C	129-00-0	Pyrene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	% Lipids	% Lipids	% Lipids	3			%
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	5.3		0.1	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.1	UJ	0.1	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.99	J	0.1	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.06	UJ	0.06	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.07	UJ	0.07	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.06	UJ	0.06	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.2	U	0.04	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.43	J	0.06	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.11	U	0.04	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.24	J	0.06	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.05	UJ	0.05	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.06	UJ	0.06	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.04	UJ	0.04	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.11	U	0.04	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.04	UJ	0.04	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	1746-01-6	2,3,7,8-TCDD	0.05	UJ	0.05	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	51207-31-9	2,3,7,8-TCDF	0.29	J	0.04	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	37871-00-4	Total HpCDD	1.2		0.1	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	38998-75-3	Total HpCDF	2.3	J	0.06	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	34465-46-8	Total HxCDD	1.2	UJ	0.06	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	55684-94-1	Total HxCDF	10.6	J	0.04	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	36088-22-9	Total PeCDD	1.5	J	0.06	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	30402-15-4	Total PeCDF	22.1	J	0.04	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	41903-57-5	Total TCDD	0.17	UJ	0.05	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	SW8290	55722-27-5	Total TCDF	46	J	0.04	pg/g
PDA Drum Comp#2	2-Nov-00	Composite	Site	8151	93-76-5	2,4,5-T	7.5	J	8.3	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8151	93-72-1	2,4,5-TP (Silvex)	3.3	J	8.3	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8151	1918-00-9	Dicamba	20	U	20	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8151	88-85-7	Dinoseb	100	U	100	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Drum Comp#2	2-Nov-00	Composite	Site	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	72-55-9	4,4'-DDE	8	J	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	309-00-2	Aldrin	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	60-57-1	Dieldrin	6.2	J	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	72-20-8	Endrin	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	95-48-7	2-Methylphenol (o-Cresol)	220	J	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	120-12-7	Anthracene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	86-74-8	Carbazole	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	218-01-9	Chrysene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	86-73-7	Fluorene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	78-59-1	Isophorone	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	108-95-2	Phenol	510	U	510	ug/kg
PDA Drum Comp#2	2-Nov-00	Composite	Site	8270C	129-00-0	Pyrene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	% Lipids	% Lipids	% Lipids	13			%
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	6.8		0.1	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.43	U	0.1	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	1.2	J	0.09	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.05	UJ	0.05	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.07	UJ	0.07	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.06	UJ	0.06	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.47	J	0.04	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.58	J	0.06	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.16	J	0.04	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.29	J	0.06	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.05	UJ	0.05	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.1	J	0.05	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.04	UJ	0.04	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.16	J	0.04	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.13	J	0.04	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	1746-01-6	2,3,7,8-TCDD	0.14	U	0.06	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	51207-31-9	2,3,7,8-TCDF	1.3	J	0.04	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	37871-00-4	Total HpCDD	1.9		0.09	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	38998-75-3	Total HpCDF	1.4	J	0.06	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	34465-46-8	Total HxCDD	2.9	J	0.06	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	55684-94-1	Total HxCDF	13	J	0.04	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	36088-22-9	Total PeCDD	7.5	J	0.05	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	30402-15-4	Total PeCDF	43.2	J	0.04	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	41903-57-5	Total TCDD	7.2	J	0.06	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	SW8290	55722-27-5	Total TCDF	79.3	J	0.04	pg/g
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8151	1918-00-9	Dicamba	20	U	20	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8151	88-85-7	Dinoseb	100	U	100	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	72-54-8	4,4'-DDD	6.7	J	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	72-55-9	4,4'-DDE	60		25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	50-29-3	4,4'-DDT	13	J	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	309-00-2	Aldrin	25	U	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	5103-71-9	alpha-Chlordane	14	J	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	60-57-1	Dieldrin	64	J	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	959-98-8	Endosulfan I	4.3	J	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	72-20-8	Endrin	7.5	J	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	7421-93-4	Endrin aldehyde	10	J	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	5103-74-2	gamma-Chlordane	8.1	J	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	1024-57-3	Heptachlor epoxide	5.3	J	25	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	120-12-7	Anthracene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	86-74-8	Carbazole	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	218-01-9	Chrysene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	86-73-7	Fluorene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	78-59-1	Isophorone	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	108-95-2	Phenol	510	U	510	ug/kg
PDA Drum-Comp#4	3-Nov-00	Composite	Site	8270C	129-00-0	Pyrene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	% Lipids	% Lipids	% Lipids	4			%
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	7.5		0.2	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.34	U	0.2	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	1.4	J	0.1	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.08	UJ	0.08	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.1	UJ	0.1	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.1	UJ	0.1	pg/g

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.27	U	0.06	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.82	J	0.09	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.11	U	0.06	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.25	J	0.09	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.08	UJ	0.08	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.58	J	0.09	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.07	UJ	0.07	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.16	J	0.07	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.79	J	0.07	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	1746-01-6	2,3,7,8-TCDD	3.3		0.08	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	51207-31-9	2,3,7,8-TCDF	1.6	J	0.06	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	37871-00-4	Total HpCDD	1.7		0.1	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	38998-75-3	Total HpCDF	2.4	J	0.09	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	34465-46-8	Total HxCDD	2	J	0.1	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	55684-94-1	Total HxCDF	11.6	J	0.07	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	36088-22-9	Total PeCDD	2.1	J	0.09	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	30402-15-4	Total PeCDF	27.6	J	0.07	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	41903-57-5	Total TCDD	3.7	J	0.08	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	SW8290	55722-27-5	Total TCDF	46.3	J	0.06	pg/g
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8151	1918-00-9	Dicamba	20	U	20	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8151	88-85-7	Dinoseb	100	U	100	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	72-55-9	4,4'-DDE	17	J	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	50-29-3	4,4'-DDT	8.6	J	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	309-00-2	Aldrin	25	U	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	5103-71-9	alpha-Chlordane	5.8	J	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	60-57-1	Dieldrin	8.1	J	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	72-20-8	Endrin	25	U	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	7421-93-4	Endrin aldehyde	7.3	J	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	58-89-9	gamma-BHC (Lindane)	1.2	J	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	5103-74-2	gamma-Chlordane	5.2	J	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	120-12-7	Anthracene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	86-74-8	Carbazole	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	218-01-9	Chrysene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	86-73-7	Fluorene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	78-59-1	Isophorone	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	108-95-2	Phenol	510	U	510	ug/kg
UDA Buffalo Fillet	25-Oct-00	Composite	Reference	8270C	129-00-0	Pyrene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	% Lipids	% Lipids	% Lipids	9			%
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	8.1	J	0.2	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.32	UJ	0.1	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	2.8		0.1	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.06	UJ	0.06	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.08	UJ	0.08	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.33	J	0.08	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.42	J	0.05	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.3	J	0.08	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.19	J	0.05	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.51	J	0.08	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.07	UJ	0.07	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.61	J	0.07	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.06	UJ	0.06	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.27	J	0.06	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.59	J	0.06	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	1746-01-6	2,3,7,8-TCDD	0.53		0.07	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	51207-31-9	2,3,7,8-TCDF	0.35	J	0.05	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	37871-00-4	Total HpCDD	3.1		0.1	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	38998-75-3	Total HpCDF	2.2	J	0.07	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	34465-46-8	Total HxCDD	2.6	J	0.08	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	55684-94-1	Total HxCDF	18.9	J	0.06	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	36088-22-9	Total PeCDD	1.9	J	0.07	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	30402-15-4	Total PeCDF	47.8	J	0.06	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	41903-57-5	Total TCDD	0.62	J	0.07	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	SW8290	55722-27-5	Total TCDF	121	J	0.05	pg/g
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8151	1918-00-9	Dicamba	6.5	J	20	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8151	88-85-7	Dinoseb	100	U	100	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	72-54-8	4,4'-DDD	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	72-55-9	4,4'-DDE	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	50-29-3	4,4'-DDT	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	309-00-2	Aldrin	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	319-84-6	alpha-BHC	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	5103-71-9	alpha-Chlordane	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	319-85-7	beta-BHC	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	319-86-8	delta-BHC	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	60-57-1	Dieldrin	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	959-98-8	Endosulfan I	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	33213-65-9	Endosulfan II	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	1031-07-8	Endosulfan sulfate	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	72-20-8	Endrin	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	7421-93-4	Endrin aldehyde	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	53494-70-5	Endrin ketone	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	58-89-9	gamma-BHC (Lindane)	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	5103-74-2	gamma-Chlordane	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	76-44-8	Heptachlor	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	1024-57-3	Heptachlor epoxide	50	U	50	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	72-43-5	Methoxychlor	200	U	200	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8081A	8001-35-2	Toxaphene	1700	U	1700	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	120-12-7	Anthracene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	86-74-8	Carbazole	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	218-01-9	Chrysene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	86-73-7	Fluorene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	78-59-1	Isophorone	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	108-95-2	Phenol	510	U	510	ug/kg
UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference	8270C	129-00-0	Pyrene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	% Lipids	% Lipids	% Lipids	10			%
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	4.8	J	0.1	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.28	U	0.1	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.76	J	0.1	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.06	UJ	0.06	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.08	UJ	0.08	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.07	UJ	0.07	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.51	J	0.05	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.36	J	0.07	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.26	J	0.04	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.2	J	0.07	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.06	UJ	0.06	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.06	UJ	0.06	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.05	UJ	0.05	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.15	U	0.05	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.05	UJ	0.05	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	1746-01-6	2,3,7,8-TCDD	0.17	J	0.06	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	51207-31-9	2,3,7,8-TCDF	1	J	0.04	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	37871-00-4	Total HpCDD	1		0.1	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	38998-75-3	Total HpCDF	2.9	J	0.07	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	34465-46-8	Total HxCDD	1.3	U	0.07	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	55684-94-1	Total HxCDF	18.4	J	0.05	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	36088-22-9	Total PeCDD	2.2	J	0.06	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	30402-15-4	Total PeCDF	49.4	J	0.05	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	41903-57-5	Total TCDD	0.75	J	0.06	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	SW8290	55722-27-5	Total TCDF	84.2	J	0.04	pg/g
UDA Drum Comp	2-Nov-00	Composite	Reference	8151	93-76-5	2,4,5-T	7.1	J	8.3	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8151	93-72-1	2,4,5-TP (Silvex)	7.5	J	8.3	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8151	1918-00-9	Dicamba	5.2	J	20	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8151	88-85-7	Dinoseb	100	U	100	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	72-55-9	4,4'-DDE	25	J	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	50-29-3	4,4'-DDT	7.6	J	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	309-00-2	Aldrin	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	60-57-1	Dieldrin	32	J	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	959-98-8	Endosulfan I	3	J	25	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	72-20-8	Endrin	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	7421-93-4	Endrin aldehyde	7.4	J	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	5103-74-2	gamma-Chlordane	5.8	J	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	120-12-7	Anthracene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	86-74-8	Carbazole	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	218-01-9	Chrysene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	84-66-2	Diethylphthalate	110	J	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	86-73-7	Fluorene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	78-59-1	Isophorone	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	108-95-2	Phenol	510	U	510	ug/kg
UDA Drum Comp	2-Nov-00	Composite	Reference	8270C	129-00-0	Pyrene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	% Lipids	% Lipids	% Lipids	6			%
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	79.7		0.3	pg/g

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	1.2	U	0.2	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	8.8		0.2	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.59	J	0.1	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.2	UJ	0.2	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.3	J	0.1	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.85	J	0.09	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.8	J	0.1	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.08	UJ	0.08	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	1.1	J	0.1	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.1	UJ	0.1	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	40321-76-4	1,2,3,7,8-PeCDD	1	J	0.1	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.09	UJ	0.09	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.3	J	0.09	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.25	J	0.09	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	1746-01-6	2,3,7,8-TCDD	1.1		0.09	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	51207-31-9	2,3,7,8-TCDF	2.6		0.08	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	37871-00-4	Total HpCDD	12.4		0.2	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	38998-75-3	Total HpCDF	4.5	J	0.1	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	34465-46-8	Total HxCDD	4.9	J	0.1	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	55684-94-1	Total HxCDF	21.2	J	0.09	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	36088-22-9	Total PeCDD	3	J	0.1	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	30402-15-4	Total PeCDF	125	J	0.09	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	41903-57-5	Total TCDD	1.5		0.09	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	SW8290	55722-27-5	Total TCDF	67	J	0.08	pg/g
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8151	1918-00-9	Dicamba	20	U	20	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8151	88-85-7	Dinoseb	100	U	100	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	72-55-9	4,4'-DDE	13	J	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	309-00-2	Aldrin	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	60-57-1	Dieldrin	6.7	J	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	72-20-8	Endrin	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	7421-93-4	Endrin aldehyde	5.1	J	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2 chloroisopropyl ether)	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg

Appendix II-H
Results of Chemical Analysis of Fish Tissue Collected from Mississippi River near Sauget Area 2 Sites (Krummrich Data)

Sample ID	Sample Date	Sample Type 1	Sample Type 3	Analytical Method	CAS Number	Analyte	Concentration	Validation Q	Reporting Limit	Units
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	95-48-7	2-Methylphenol (o-Cresol)	110	J	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	120-12-7	Anthracene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	86-74-8	Carbazole	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	218-01-9	Chrysene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	86-73-7	Fluorene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	78-59-1	Isophorone	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	108-95-2	Phenol	510	U	510	ug/kg
UDA-UE Comp Shad	27-Oct-00	Composite	Reference	8270C	129-00-0	Pyrene	510	U	510	ug/kg

Appendix II-I

Data used for the derivation of fish tissue no-effect toxicity reference value (TRV)

Appendix II-I

Data used for the derivation of fish tissue no-effect toxicity reference value (TRV).

Analyte Name	CAS No	Species Common Name	Effect	Endpoint	Exposure Route	Body Part	Species Start Lifestage	Residue Conc. Wet (mg/kg)	NOEL Equivalent Conc	Calculated TRV (mg/kg)	Reference
SVOCs											
1,2-dichlorobenzene	95-50-1	Bluegill	Mortality	NOED	Absorption	Whole Body	Immature	0.7	0.7	0.7	Barrows, M.E., et al 1980
1,4-dichlorobenzene	106-46-7	Bluegill	Mortality	NOED	Absorption	Whole Body	Immature	0.61	0.61	0.61	Barrows, M.E., et al 1980
2,4-Dichlorophenol	120-83-2	Goldfish	Mortality	NOED	Water	Whole Body	Adult	100	100	134.2	Kishino T, and K Kobayashi, 1995
	120-83-2	Goldfish	Mortality	NOED	Water	Whole Body	Adult	180	180		Kishino T, and K Kobayashi, 1995
2-Methylpheno		Golden Ide	Mortality	NOED	Absorption	Whole Body	NA	1	1	1	Freitag, D., et al 1985
Pesticides											
4,4'-DDD	72-54-8	Fathead minnow	Reproduction	LOED	Combined	Whole Body	Adult	0.6	0.06	0.06	Jarvinen, A.W., at al 1977
4,4`-DDE	72-55-9	Trout - Brook	Growth	NOED	Injection	Whole Body	Juvenile	5	5	1.61	Addison, R.F. and M.E. Zinck, 1977
	72-55-9	Trout - Brook	Mortality	NOED	Injection	Whole Body	Juvenile	5	5		Addison, R.F. and M.E. Zinck, 1978
	72-55-9	Trout - Brook	Behavior	LOED	Combined	Whole Body	Immature	44.9	4.49		Peterson, R.H., 1973
4,4`-DDT	50-29-3	Fathead minnow	Mortality	LOED	Ingestion	Whole Body	Adult	68.9	6.89	3.90	Jarvinen AW, at al 1977
	50-29-3	Fathead minnow	Reproduction	LOED	Water	Whole Body	Adult	24	2.4		Jarvinen AW, at al 1977
	50-29-3	Fathead minnow	Reproduction	NOED	Ingestion	Whole Body	Adult	12.2	12.2		Jarvinen AW, at al 1977
	50-29-3	Fathead minnow	Reproduction	NOED	Combined	Whole Body	Adult	19	19		Jarvinen AW, at al 1977
	50-29-3	Fathead minnow	Reproduction	LOED	Combined	Whole Body	Adult	3.8	0.38		Jarvinen AW, at al 1977
	50-29-3	Fathead minnow	Reproduction	LOED	Combined	Whole Body	Adult	24	2.4		Jarvinen AW, at al 1977
Alpha-BHC		Golden Ide	Mortality	NOED	Absorption	Whole Body	NA	22.5	22.5	22.5	Freitag, D., et al 1985
Alpha-Chlordane	57-74-9	Pinfish	Mortality	LOED	Combined	Whole Body	Adult	16.6	1.66	1.66	Parrish, P.R., et al 1976
Dieldrin	60-57-1	Bluegill	Behavior	LOED	Absorption	Whole Body	Immature	3.7	0.37	0.37	Gakstatter, J.H. and C.M. Weiss, 1967
Endosulfan I	115-29-7	Pinfish	Mortality	NOED	Combined	Whole Body	Mature	0.195	0.195	0.195	Schimmel, S.C., et al 1977
Endrin	72-20-8	Catfish-Channel	Behavior	LOED	Absorption	Whole Body	Immature	1	0.1	0.164	Argyle, R.L., et al 1973
	72-20-8	Catfish-Channel	Growth	NOED	Ingestion	Whole Body	Immature	0.307	0.307		Argyle, R.L., et al 1973
	72-20-8	Catfish-Channel	Mortality	NOED	Ingestion	Whole Body	Immature	0.307	0.307		Argyle, R.L., et al 1973
	72-20-8	Catfish-Channel	Mortality	NOED	Absorption	Whole Body	Immature	0.41	0.41		Argyle, R.L., et al 1973
	72-20-8	Golden Shiner	Behavior	NOED	Absorption	Whole Body	Adult	0.24	0.24		Ludke, J.L., et al 1968
	72-20-8	Golden Shiner	Behavior	LOED	Absorption	Whole Body	Adult	0.21	0.021		Ludke, J.L., et al 1968
Endrin Aldehyde	72-20-8	Catfish-Channel	Behavior	LOED	Absorption	Whole Body	Immature	1	0.1	0.164	Argyle, R.L., et al 1973
	72-20-8	Catfish-Channel	Growth	NOED	Ingestion	Whole Body	Immature	0.307	0.307		Argyle, R.L., et al 1973
	72-20-8	Catfish-Channel	Mortality	NOED	Ingestion	Whole Body	Immature	0.307	0.307		Argyle, R.L., et al 1973
	72-20-8	Catfish-Channel	Mortality	NOED	Absorption	Whole Body	Immature	0.41	0.41		Argyle, R.L., et al 1973
	72-20-8	Golden Shiner	Behavior	NOED	Absorption	Whole Body	Adult	0.24	0.24		Ludke, J.L., et al 1968
	72-20-8	Golden Shiner	Behavior	LOED	Absorption	Whole Body	Adult	0.21	0.021		Ludke, J.L., et al 1968
Gamma-Chlordane	57-74-9	Pinfish	Mortality	LOED	Combined	Whole Body	Adult	16.6	1.66	1.66	Parrish, P.R., et al 1976
Heptachlor epoxide	1024-57-3	Pinfish	Mortality	NOED	Combined	Whole Body	Mature	3.2	3.2	3.2	Schimmel, S.C., et al 1976
Herbicides											
2,4,5-T	94-75-7	Bluegill, Carp	Mortality	LC-50	NA	NA	NA	29.8	0.298	0.298	USEPA Ecotox Database (Ref # 880, 6270, 859)
2,4,5-TP (Silvex)	93-72-1	Channel Catfish, Bluegill, Fathead Minnowq	Mortality	LC-50	NA	NA	NA	50.7	0.507	0.507	Johnson, W.W., and M.T. Finley, 1980; Mayer, F.L.J., and M.R. Ellersieck, 1986; Surber, E.W., and Q.H. Pickering, 1962
MCPP	7085-19-0	Carp, Bluegill, Rainbowtrou	Mortality	LC-50	NA	NA	NA	574.1	5.741	5.741	Tscheu-Schluter, M., 1974; Office of Pesticide Programs, 2000
Dioxins/Furans											
2,3,7,8-TCDD (TEQ)										2.69E-03	
1,2,3,4,6,7,8,9-OCDF	39001-02-0	Salmon - Atlantic	Mortality	NOED	Ingestion	Muscle	Juvenile	0.01	0.01	1.41E-02	Zitko, V. and P.M.K. Choi., 1973
	39001-02-0	Salmon - Atlantic	Mortality	NOED	Ingestion	Gastrointestinal Tract	Juvenile	0.02	0.02		Zitko, V. and P.M.K. Choi., 1973
1,2,3,4,6,7,8-HCDD	35822-46-9	Trout - Rainbow	Biochemical	LOED	Ingestion	Liver	Adult	0.19	0.019	1.90E-02	Parrott, J.L., et al 1995
1,2,3,4,7,8-HCDD	39227-28-6	Trout - Rainbow	Biochemical	LOED	Ingestion	Liver	Adult	0.000039	0.0000039	3.90E-06	Parrott, J.L., et al 1995

Appendix II-I

Data used for the derivation of fish tissue no-effect toxicity reference value (TRV).

Analyte Name	CAS No	Species Common Name	Effect	Endpoint	Exposure Route	Body Part	Species Start Lifestage	Residue Conc. Wet (mg/kg)	NOEL Equivalent Conc	Calculated TRV (mg/kg)	Reference
	39227-28-6	Trout - Rainbow	Biochemical	LOED	Ingestion	Liver	Adult	0.000039	0.0000039		Parrott, J.L., et al 1995
1,2,3,4,7,8-HxCDF	70648-26-9	Trout - Rainbow	Mortality	LD50	Injection	Whole Body	Fry	0.00099	0.0000099	9.90E-06	Walker MK and RE Peterson, 1991
1,2,3,6,7,8-HxCDD	57653-85-7	Trout - Rainbow	Survival, Growth	NOED	Water	Liver	Subadult	0.01	0.01	0.01	Walker MK and RE Peterson, 1991
1,2,3,7,8-PcCDD	40321-76-4	Trout - Rainbow	Mortality	LD50	Injection	Whole Body	Fry	0.000566	5.66E-06	5.66E-06	Walker MK and RE Peterson, 1991
1,2,3,7,8-PeCDF	57117-41-6	Trout - Rainbow	Mortality	LD50	Injection	Whole Body	Fry	0.00734	0.0000734	7.34E-05	Walker MK and RE Peterson, 1991
2,3,4,7,8-PCDF	57117-31-4	Trout - Rainbow	Mortality	LD50	Injection	Whole Body	Fry	0.0007	0.000007	1.02E-04	Walker MK and RE Peterson, 1991
		Trout - Rainbow	Growth	NOED	Water	Whole Body	Juvenile	0.0015	0.0015		Muir DCG, et al 1990
2,3,7,8-TCDF	51207-31-9	Trout - Rainbow	Growth	NOED	Combined	Whole Body	Immature	0.00009	0.00009	4.74E-04	Mehrle, P.M., et al 1988
	51207-31-9	Trout - Rainbow	Growth	NOED	Ingestion	Whole Body	Juvenile	0.0025	0.0025		Muir DCG, et al 1990
2,3,7,8-TCDD	1746-01-6	Black Bullhead	Mortality	NOED	Injection	Whole Body	NA	0.001	0.001	2.69E-03	Kleeman, J.M., et al 1988
	1746-01-6	Bluegill	Mortality	NOED	Injection	Whole Body	NA	0.001	0.001		Kleeman, J.M., et al 1988
	1746-01-6	Catfish-Channel	Mortality	NOED	Combined	Whole Body	Adult	0.14	0.14		Isensee, A.R. and G.E. Jones, 1975
	1746-01-6	Common carp	Mortality	NOED	Injection	Whole Body	NA	0.001	0.001		Kleeman, J.M., et al 1988
	1746-01-6	Largemouth Bass	Mortality	NOED	Injection	Whole Body	NA	0.001	0.001		Kleeman, J.M., et al 1988

Reference:

Barrows, M.E., S.R. Petrocelli, K.J. Macek and J.J. Carroll (1980) p. 379-392 in Haque, R., ed. Dynamics, Exposure and Hazard Assessment of Toxic Chemicals

Kishino T, K Kobayashi (1995) Water Res 29:431-442

Freitag, D., Ballhorn, L., Geyer, H., and Korte, F. (1985) Chemosphere 14:1589-1616

Jarvinen, A.W., M.J. Hoffman, and T.W. Thorslund (1977) J. Fish. Res. Board. Can. 34:2089-2103

Addison, R.F. and M.E. Zinck (1977) J. Fish. Res. Bd. Can. 34:119-122.

Peterson, R.H. (1973) Journal Fisheries Research Board of Canada, Vol. 30, No. 8, 1973

Jarvinen AW, MJ Hoffman, TW Thorslund (1977) J Fish Res Bd Can 34:2089-2103

Freitag, D., Ballhorn, L., Geyer, H., and Korte, F. (1985) Chemosphere 14:1589-1616

Parrish, P.R., S.C. Schimmel, D.J. Hansen, J.M. Patrick, and J. Forester (1976) Journal of Toxicology and Environmental Health, 1:485-494

Gakstatter, J.H. and C.M. Weiss (1967) Trans. Amer. Fish. Soc. 96:301-307.

Schimmel, S.C., Patrick, J.M., Wilson, A.J. (1977) Aquatic Toxicology and Hazard Evaluation, ASTM STP 634, American Society for Testing and Materials, pp. 241-252

Argyle, R.L., Williams, G.C., and H.K. Dupree (1973) J. Fish. Res. Board Can. 30: 1743-1744

Ludke, J.L., D.E. Ferguson and W.D. Burke (1968) Trans. Amer. Fish. Soc. 97:260-263

Schimmel, S.C., Patrick, J.M., Forester, J. (1976) Journal of Toxicology and Environmental Health, 1:955-965

USEPA Ecotox Database (Ref # 880, 6270, 859)

Johnson, W.W., and M.T. Finley, 1980; Mayer, F.L.J., and M.R. Ellersieck, 1986; Surber, E.W., and Q.H. Pickering, 1962

Tscheu-Schluter, M., 1974; Office of Pesticide Programs, 2000

Zitko, V. and P.M.K. Choi. (1973) Bull. Environ. Contam. Toxicol. 10(2):120-122.

Parrott, J.L., P.V. Hodson, M.R. Servos, S.L. Huestis, and G.D. Dixon (1995) Environmental Toxicology and Chemistry, Vol. 14, No. 6, pp. 1041-1050

Walker MK and RE Peterson (1991) Aquatic Toxicology 21:219-238

Muir DCG, AL Yarechewski, DA Metner, WL Lockhart, GRB Webster, KJ Friesen (1990) Environ Tox & Chem 9:1463-1472

Mehrle, P.M., D.R. Buckler, E.E. Little, L.M. Smith, J.D. Petty, P.H. Peterman, D.L. Stalling, G.M. DeGraeve, J.J. Coyle and W.J. Adam (1988) Environmental Toxicology and Chemistry 7:47-62

Kleeman, J.M., J.R. Olson and R.E. Peterson (1988) Fundam. Appl. Toxicol. 10:206-213.

Isensee, A.R. and G.E. Jones (1975) Environ. Sci. Technol. 9:668-672.

Appendix II-J1

Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2002

Appendix II-J1
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2002.

Chem Class	CAS	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
VOCs	71-55-6	1,1,1-Trichloroethane	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	79-34-5	1,1,2,2-Tetrachloroethane	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	79-00-5	1,1,2-Trichloroethane	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	75-34-3	1,1-Dichloroethane	ug/kg	8.0	1.9	1/38	2.3	1.7	1.4	0/8	1.6
VOCs	75-35-4	1,1-Dichloroethylene	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	120-82-1	1,2,4-Trichlorobenzene	ug/kg	385	231	0/36	248	250	194	0/8	216
VOCs	95-50-1	1,2-Dichlorobenzene	ug/kg	365	217	3/36	237	250	194	0/8	216
VOCs	107-06-2	1,2-Dichloroethane	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	540-59-0	1,2-Dichloroethene (total)	ug/kg	7.0	2.8	1/38	3.1	1.7	1.4	0/8	1.6
VOCs	78-87-5	1,2-Dichloropropane	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	541-73-1	1,3-Dichlorobenzene	ug/kg	385	231	0/36	248	250	194	0/8	216
VOCs	106-46-7	1,4-Dichlorobenzene	ug/kg	740	241	1/36	272	250	194	0/8	216
VOCs	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg	385	231	0/36	248	250	194	0/8	216
VOCs	78-93-3	2-Butanone (MEK)	ug/kg	26	7.6	5/38	8.9	8.5	6.7	1/8	7.8
VOCs	108-10-1	4-Methyl-2-pentanone (MIBK)	ug/kg	26	8.6	0/38	10	8.5	7.1	0/8	7.8
VOCs	67-64-1	Acetone	ug/kg	290	25	32/38	42	98	32	7/8	58
VOCs	71-43-2	Benzene	ug/kg	49	3.9	4/38	6.8	1.7	1.4	0/8	1.6
VOCs	75-27-4	Bromodichloromethane	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	75-25-2	Bromoform	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	74-83-9	Bromomethane	ug/kg	10	3.5	0/38	4.0	3.5	2.9	0/8	3.2
VOCs	75-15-0	Carbon Disulfide	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	56-23-5	Carbon Tetrachloride	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	108-90-7	Chlorobenzene	ug/kg	11000	457	8/38	1075	1.7	1.4	0/8	1.6
VOCs	124-48-1	Chlorodibromomethane	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	75-00-3	Chloroethane	ug/kg	10	3.5	0/38	4.0	3.5	2.9	0/8	3.2
VOCs	67-66-3	Chloroform	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	74-87-3	Chloromethane	ug/kg	10	3.8	0/38	4.5	3.5	2.9	0/8	3.2
VOCs	10061-01-5	cis-1,3-Dichloropropene	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	75-09-2	Dichloromethane	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	100-41-4	Ethylbenzene	ug/kg	16	2.5	27/38	3.5	1.7	1.4	0/8	1.6
VOCs	591-78-6	Methyl N-Butyl Ketone	ug/kg	26	8.6	0/38	10	8.5	7.1	0/8	7.8

Appendix II-J1
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2002.

Chem Class	CAS	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
VOCs	100-42-5	Styrene (Monomer)	ug/kg	37	2.7	4/38	4.6	1.7	1.4	0/8	1.6
VOCs	127-18-4	Tetrachloroethene	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6
VOCs	108-88-3	Toluene	ug/kg	14	2.6	12/38	3.5	1.7	1.4	0/8	1.6
VOCs	79-01-6	Trichloroethylene	ug/kg	5.0	1.7	1/38	2.0	1.7	1.4	0/8	1.6
VOCs	75-01-4	Vinyl chloride	ug/kg	10	3.5	0/38	4.0	3.5	2.9	0/8	3.2
VOCs	1330-20-7	Xylenes, Total	ug/kg	81	12	34/38	17	5.5	3.5	1/8	4.2
SVOCs	95-95-4	2,4,5-Trichlorophenol	ug/kg	385	231	0/37	248	250	194	0/8	216
SVOCs	88-06-2	2,4,6-Trichlorophenol	ug/kg	385	231	0/37	248	250	194	0/8	216
SVOCs	120-83-2	2,4-Dichlorophenol	ug/kg	385	231	0/37	248	250	194	0/8	216
SVOCs	105-67-9	2,4-Dimethylphenol	ug/kg	385	231	0/37	248	250	194	0/8	216
SVOCs	51-28-5	2,4-Dinitrophenol	ug/kg	2000	1197	0/37	1283	1300	1013	0/8	1125
SVOCs	121-14-2	2,4-Dinitrotoluene	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	606-20-2	2,6-Dinitrotoluene	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	91-58-7	2-Chloronaphthalene	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	95-57-8	2-Chlorophenol	ug/kg	385	231	0/37	248	250	194	0/8	216
SVOCs	91-57-6	2-Methylnaphthalene	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	95-48-7	2-Methylphenol (o-Cresol)	ug/kg	385	231	0/37	248	250	194	0/8	216
SVOCs	88-74-4	2-Nitroaniline	ug/kg	2000	1196	0/36	1284	1300	1013	0/8	1125
SVOCs	88-75-5	2-Nitrophenol	ug/kg	385	231	0/37	248	250	194	0/8	216
SVOCs	91-94-1	3,3'-Dichlorobenzidine	ug/kg	750	463	0/36	496	500	389	0/8	432
SVOCs	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg	385	231	0/37	248	250	194	0/8	216
SVOCs	99-09-2	3-Nitroaniline	ug/kg	2000	1196	0/36	1284	1300	1013	0/8	1125
SVOCs	534-52-1	4,6-Dinitro-2-methylphenol	ug/kg	2000	1197	0/37	1283	1300	1013	0/8	1125
SVOCs	101-55-3	4-Bromophenyl Phenyl Ether	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	59-50-7	4-Chloro-3-methylphenol	ug/kg	385	231	0/37	248	250	194	0/8	216
SVOCs	7005-72-3	4-Chlorophenyl Phenyl Ether	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	100-02-7	4-Nitrophenol	ug/kg	2000	1197	0/37	1283	1300	1013	0/8	1125
SVOCs	83-32-9	Acenaphthene	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	208-96-8	Acenaphthylene	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	120-12-7	Anthracene	ug/kg	365	223	1/36	239	250	194	0/8	216
SVOCs	56-55-3	Benzo(a)anthracene	ug/kg	365	213	3/36	235	250	194	0/8	216
SVOCs	50-32-8	Benzo(a)pyrene	ug/kg	365	199	6/36	224	250	194	0/8	216
SVOCs	205-99-2	Benzo(b)fluoranthene	ug/kg	365	214	3/36	235	250	194	0/8	216
SVOCs	191-24-2	Benzo(g,h,i)perylene	ug/kg	365	197	6/36	224	250	194	0/8	216

Appendix II-J1
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2002.

Chem Class	CAS	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
SVOCs	207-08-9	Benzo(k)fluoranthene	ug/kg	365	197	6/36	222	250	194	0/8	216
SVOCs	85-68-7	Benzyl Butyl Phthalate	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	111-91-1	bis(2-Chloroethoxy)methane	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	111-44-4	bis(2-Chloroethyl)ether	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	117-81-7	bis(2-Ethylhexyl)phthalate	ug/kg	365	197	6/36	221	250	194	0/8	216
SVOCs	86-74-8	Carbazole	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	218-01-9	Chrysene	ug/kg	360	179	8/36	207	220	166	1/8	207
SVOCs	53-70-3	Dibenzo(a,h)anthracene	ug/kg	385	226	1/36	245	250	194	0/8	216
SVOCs	132-64-9	Dibenzofuran	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	84-66-2	Diethyl Phthalate	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	131-11-3	Dimethyl Phthalate	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	84-74-2	Di-n-butylphthalate	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	117-84-0	Di-n-octylphthalate	ug/kg	385	226	1/36	246	250	194	0/8	216
SVOCs	206-44-0	Fluoranthene	ug/kg	360	199	5/36	220	220	145	2/8	191
SVOCs	86-73-7	Fluorene	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	118-74-1	Hexachlorobenzene	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	87-68-3	Hexachlorobutadiene	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	77-47-4	Hexachlorocyclopentadiene	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	67-72-1	Hexachloroethane	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	193-39-5	Indeno(1,2,3-cd)pyrene	ug/kg	385	221	2/36	244	250	194	0/8	216
SVOCs	78-59-1	Isophorone	ug/kg	390	236	1/36	255	250	194	0/8	216
SVOCs	91-20-3	Naphthalene	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	98-95-3	Nitrobenzene	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	621-64-7	N-Nitroso-di-n-propylamine	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	86-30-6	N-Nitrosodiphenylamine	ug/kg	385	231	0/36	248	250	194	0/8	216
SVOCs	106-47-8	P-Chloroaniline	ug/kg	3000	558	2/36	708	500	389	0/8	432
SVOCs	87-86-5	Pentachlorophenol	ug/kg	19	10	6/35	12				
SVOCs	85-01-8	Phenanthrene	ug/kg	365	210	3/36	232	220	167	1/8	207
SVOCs	108-95-2	Phenol	ug/kg	385	231	0/37	248	250	194	0/8	216
SVOCs	100-01-6	P-Nitroaniline	ug/kg	2000	1197	0/37	1283	1300	1013	0/8	1125
SVOCs	129-00-0	Pyrene	ug/kg	365	224	1/36	239	220	171	1/8	204
SVOCs	10061-02-6	trans-1,3-Dichloropropene	ug/kg	5.0	1.7	0/38	2.0	1.7	1.4	0/8	1.6

Appendix II-J1
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2002.

Chem Class	CAS	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
Pesticides	72-54-8	4,4'-DDD	ug/kg	4.4	2.4	2/36	2.7	2.5	1.9	0/8	2.2
Pesticides	72-55-9	4,4'-DDE	ug/kg	4.9	2.0	10/36	2.3	2.2	1.9	0/7	2.0
Pesticides	50-29-3	4,4'-DDT	ug/kg	7.7	2.6	3/34	3.1	2.2	1.8	0/6	2.0
Pesticides	309-00-2	Aldrin	ug/kg	2.3	1.3	1/37	1.4	1.3	1.0	0/8	1.1
Pesticides	319-84-6	alpha-BHC	ug/kg	2.3	1.3	0/36	1.4	1.3	1.0	0/8	1.1
Pesticides	5103-71-9	alpha-Chlordane	ug/kg	2.3	1.3	1/36	1.4	1.3	1.0	0/8	1.1
Pesticides	319-85-7	beta-BHC	ug/kg	2.3	1.2	2/36	1.3	1.3	1.0	0/8	1.1
Pesticides	319-86-8	delta-BHC	ug/kg	2.3	1.2	1/36	1.4	1.3	1.0	0/8	1.1
Pesticides	60-57-1	Dieldrin	ug/kg	4.4	2.4	3/37	2.6	2.5	1.9	0/8	2.2
Pesticides	959-98-8	Endosulfan I	ug/kg	2.3	1.2	1/36	1.4	1.3	1.0	0/8	1.1
Pesticides	33213-65-9	Endosulfan II	ug/kg	4.4	2.5	0/36	2.7	2.5	1.9	0/8	2.2
Pesticides	1031-07-8	Endosulfan Sulfate	ug/kg	4.4	2.5	0/36	2.7	2.5	1.9	0/8	2.2
Pesticides	72-20-8	Endrin	ug/kg	4.4	2.5	0/36	2.7	2.5	1.9	0/8	2.2
Pesticides	7421-93-4	Endrin Aldehyde	ug/kg	4.4	2.4	10/36	2.7	2.5	1.9	0/8	2.2
Pesticides	53494-70-5	Endrin Ketone	ug/kg	4.4	2.0	9/36	2.3	2.5	1.9	0/8	2.2
Pesticides	58-89-9	gamma-BHC (Lindane)	ug/kg	2.3	1.2	1/36	1.4	1.3	1.0	0/8	1.1
Pesticides	5103-74-2	gamma-Chlordane	ug/kg	3.0	1.2	7/36	1.3	1.3	1.0	0/8	1.1
Pesticides	76-44-8	Heptachlor	ug/kg	2.3	1.2	5/36	1.3	1.3	1.0	0/8	1.1
Pesticides	1024-57-3	Heptachlor Epoxide	ug/kg	11	1.5	3/38	2.0	1.3	1.0	0/8	1.1
Pesticides	72-43-5	Methoxychlor	ug/kg	40	13	3/36	15	13	10	0/8	11
Pesticides	8001-35-2	Toxaphene	ug/kg	230	128	0/36	140	130	101	0/8	112
Herbicides	93-76-5	2,4,5-T	ug/kg	9.5	5.8	0/35	6.3				
Herbicides	93-72-1	2,4,5-TP (Silvex)	ug/kg	9.5	5.8	0/35	6.3				
Herbicides	94-75-7	2,4-D	ug/kg	20	7.1	5/37	8.3	5.2	5.2	1/1	
Herbicides	94-82-6	2,4-DB	ug/kg	9.5	5.8	0/35	6.3				
Herbicides	75-99-0	Dalapon	ug/kg	2200	1281	2/25	1469				
Herbicides	1918-00-9	Dicamba	ug/kg	23	14	0/35	15				
Herbicides	120-36-5	Dichlorprop	ug/kg	115	66	2/35	73	23	18	5/5	22
Herbicides	88-85-7	Dinoseb	ug/kg	385	231	0/36	248	250	194	0/8	216
Herbicides	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	ug/kg	2200	1349	1/35	1454				
Herbicides	93-65-2	MCPP	ug/kg	2500	1391	2/35	1501	460	415	2/2	503

Appendix II-J1
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2002.

Chem Class	CAS	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
PCBs	2051-24-3	Decachlorobiphenyl	ug/kg	20	12	0/38	13	13	10	0/8	11
PCBs	C-DICHLOROBI	Dichlorobiphenyl	ug/kg	14	2.5	3/38	3.1	2.5	1.9	0/8	2.2
PCBs	C-HEPTACHLOR	Heptachlorobiphenyl	ug/kg	12	6.9	0/38	7.4	7.5	5.8	0/8	6.5
PCBs	C-HEXACHLORO	Hexachlorobiphenyl	ug/kg	8.0	4.7	0/38	5.0	5.0	3.9	0/8	4.4
PCBs	C-MONOCHLORO	Monochlorobiphenyl	ug/kg	29	3.0	4/38	4.4	2.5	1.9	0/8	2.2
PCBs	C-NONACHLORO	Nonachlorobiphenyl	ug/kg	19	12	2/38	12	13	10	0/8	11
PCBs	C-OCTA-BIPHE	Octachlorobiphenyl	ug/kg	12	6.9	0/38	7.4	7.5	5.8	0/8	6.5
PCBs	C-PENTBIPHEN	Pentachlorobiphenyl	ug/kg	7.5	4.6	1/38	4.9	5.0	3.9	0/8	4.4
PCBs	C-TETRACHLOR	Tetrachlorobiphenyl	ug/kg	8.0	4.7	0/38	5.0	5.0	3.9	0/8	4.4
PCBs	C-TRICHLOROB	Trichlorobiphenyl	ug/kg	10	2.4	4/38	2.8	2.5	1.9	0/8	2.2
Dioxins	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.055	0.019	3/5	0.038	0.0012	0.00088	0/2	0.0015
Dioxins	67562-39-4	1,2,3,4,6,7,8-HpCDF	ug/kg	0.0077	0.0026	2/5	0.0054	0.000455	0.00033	0/2	0.00058
Dioxins	55673-89-7	1,2,3,4,7,8,9-HpCDF	ug/kg	0.00075	0.00036	0/5	0.00058	0.00050	0.00036	0/2	0.00064
Dioxins	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	0.00070	0.00039	0/5	0.00065	0.00060	0.00046	0/2	0.00074
Dioxins	70648-26-9	1,2,3,4,7,8-HxCDF	ug/kg	0.00049	0.00035	0/5	0.00050	0.00055	0.00041	0/2	0.00069
Dioxins	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	0.0010	0.00051	0/5	0.00080	0.00065	0.00049	0/2	0.00080
Dioxins	57117-44-9	1,2,3,6,7,8-HxCDF	ug/kg	0.00049	0.00028	0/5	0.00045	0.00055	0.00040	0/2	0.00069
Dioxins	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	ug/kg	0.00075	0.00041	0/5	0.00067	0.00060	0.00046	0/2	0.00074
Dioxins	72918-21-9	1,2,3,7,8,9-HxCDF	ug/kg	0.00065	0.00036	0/5	0.00060	0.00070	0.00052	0/2	0.00088
Dioxins	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ug/kg	0.00070	0.00031	0/5	0.00054	0.00042	0.00032	0/2	0.00052
Dioxins	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	ug/kg	0.0011	0.00051	0/5	0.00088	0.00085	0.00062	0/2	0.0011
Dioxins	60851-34-5	2,3,4,6,7,8-HxCDF	ug/kg	0.00055	0.00031	0/5	0.00050	0.00060	0.00044	0/2	0.00075
Dioxins	57117-31-4	2,3,4,7,8-PeCDF	ug/kg	0.00070	0.00031	0/5	0.00054	0.000415	0.00031	0/2	0.00052
Dioxins	1746-01-6	2,3,7,8-TCDD	ug/kg	0.00047	0.00021	0/5	0.00037	0.00030	0.00024	0/2	0.00035
Dioxins	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.0011	0.00034	1/5	0.00071	0.000255	0.00021	0/2	0.00030
Dioxins	3268-87-9	OCDD	ug/kg	1.8	0.50	5/5	1.2	0.035	0.024	2/2	0.046
Dioxins	39001-02-0	OCDF	ug/kg	0.036	0.015	3/5	0.029	0.00065	0.00048	0/2	0.00082
Dioxins	37871-00-4	Total HpCDD	ug/kg	0.13	0.041	3/5	0.088	0.0027	0.0016	1/2	0.0037
Dioxins	38998-75-3	Total HpCDF	ug/kg	0.029	0.011	3/5	0.022	0.00050	0.00036	0/2	0.00064
Dioxins	34465-46-8	Total HxCDD	ug/kg	0.015	0.0034	1/5	0.0091	0.00065	0.00049	0/2	0.00080
Dioxins	55684-94-1	Total HxCDF	ug/kg	0.0046	0.0013	1/5	0.0030	0.00070	0.00052	0/2	0.00088
Dioxins	36088-22-9	Total PeCDD	ug/kg	0.0011	0.00054	0/5	0.00088	0.00085	0.00062	0/2	0.0011
Dioxins	30402-15-4	Total PeCDF	ug/kg	0.0047	0.0011	1/5	0.0029	0.000435	0.00034	0/2	0.00053
Dioxins	41903-57-5	Total TCDD	ug/kg	0.012	0.0027	2/5	0.0073	0.00030	0.00024	0/2	0.00035
Dioxins	55722-27-5	Total TCDF	ug/kg	0.018	0.0037	1/5	0.011	0.000255	0.00021	0/2	0.00030

Appendix II-J1
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2002.

Chem Class	CAS	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
Metals	7429-90-5	Aluminum	mg/kg	9400	2798	38/38	3579	5900	1689	8/8	2933
Metals	7440-36-0	Antimony	mg/kg	2.2	1.3	0/38	1.4	1.5	1.2	0/8	1.3
Metals	7440-38-2	Arsenic	mg/kg	7.5	2.9	38/38	3.4	5.6	2.2	8/8	3.2
Metals	7440-39-3	Barium	mg/kg	300	85	38/38	107	140	42	8/8	74
Metals	7440-41-7	Beryllium	mg/kg	0.64	0.23	28/38	0.29	0.48	0.26	1/8	0.32
Metals	7440-43-9	Cadmium	mg/kg	1.4	0.48	18/38	0.58	1.2	0.38	1/8	0.61
Metals	7440-70-2	Calcium	mg/kg	18000	5918	38/38	7324	8200	2790	8/8	4835
Metals	7440-47-3	Chromium	mg/kg	19	6.7	38/38	8.1	11	4.7	8/8	6.8
Metals	7440-48-4	Cobalt	mg/kg	10	4.0	38/38	4.6	6.0	3.1	8/8	4.0
Metals	7440-50-8	Copper	mg/kg	20	5.9	32/38	7.6	12	2.9	8/8	5.6
Metals	7439-89-6	Iron	mg/kg	20000	8016	38/38	9500	12000	5088	8/8	7303
Metals	7439-92-1	Lead	mg/kg	47	16	38/38	21	12	4.4	8/8	7.0
Metals	7439-95-4	Magnesium	mg/kg	6400	2166	38/38	2645	3400	1246	8/8	2007
Metals	7439-96-5	Manganese	mg/kg	1000	267	38/38	350	500	185	8/8	279
Metals	7439-97-6	Mercury	mg/kg	0.067	0.019	26/38	0.025	0.13	0.030	4/8	0.061
Metals	7440-02-0	Nickel	mg/kg	21	8.7	38/38	10	15	7.2	8/8	9.6
Metals	7440-09-7	Potassium	mg/kg	1300	435	38/38	539	820	256	8/8	435
Metals	7782-49-2	Selenium	mg/kg	1.1	0.65	0/38	0.69	0.65	0.54	0/8	0.59
Metals	7440-22-4	Silver	mg/kg	1.1	0.63	1/38	0.69	0.65	0.54	0/8	0.59
Metals	7440-23-5	Sodium	mg/kg	290	78	21/38	96	78	40	8/8	53
Metals	7440-28-0	Thallium	mg/kg	2.1	0.74	1/38	0.84	0.65	0.54	0/8	0.59
Metals	7440-62-2	Vanadium	mg/kg	25	9.6	38/38	11	19	6.4	8/8	10
Metals	7440-66-6	Zinc	mg/kg	310	89	37/38	117	89	21	7/8	41

Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Appendix II-J2

Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2005

Appendix II-J2
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2005.

Chem Class	CAS	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
VOCs	71-55-6	1,1,1-Trichloroethane	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	79-34-5	1,1,2,2-Tetrachloroethane	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	79-00-5	1,1,2-Trichloroethane	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	75-34-3	1,1-Dichloroethane	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	75-35-4	1,1-Dichloroethylene	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	120-82-1	1,2,4-Trichlorobenzene	ug/kg	360	235	0/10	276	250	194	0/8	216
VOCs	95-50-1	1,2-Dichlorobenzene	ug/kg	240	173	4/10	210	250	194	0/8	216
VOCs	107-06-2	1,2-Dichloroethane	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	540-59-0	1,2-Dichloroethene (total)	ug/kg	15	6.9	0/10	9.1	1.7	1.4	0/8	1.6
VOCs	78-87-5	1,2-Dichloropropane	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	541-73-1	1,3-Dichlorobenzene	ug/kg	360	235	0/10	276	250	194	0/8	216
VOCs	106-46-7	1,4-Dichlorobenzene	ug/kg	650	225	4/10	323	250	194	0/8	216
VOCs	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg	360	248	0/7	304	250	194	0/8	216
VOCs	78-93-3	2-Butanone (MEK)	ug/kg	38	17	0/10	23	8.5	6.7	1/8	7.8
VOCs	108-10-1	4-Methyl-2-pentanone (MIBK)	ug/kg	38	17	0/10	23	8.5	7.1	0/8	7.8
VOCs	67-64-1	Acetone	ug/kg	55	30	1/10	36	98	32	7/8	58
VOCs	71-43-2	Benzene	ug/kg	5.5	3.2	1/10	4.0	1.7	1.4	0/8	1.6
VOCs	75-27-4	Bromodichloromethane	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	75-25-2	Bromoform	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	74-83-9	Bromomethane	ug/kg	7.5	3.5	0/10	4.6	3.5	2.9	0/8	3.2
VOCs	75-15-0	Carbon Disulfide	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	56-23-5	Carbon Tetrachloride	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	108-90-7	Chlorobenzene	ug/kg	450	61	7/10	148	1.7	1.4	0/8	1.6
VOCs	124-48-1	Chlorodibromomethane	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	75-00-3	Chloroethane	ug/kg	7.5	3.5	0/10	4.6	3.5	2.9	0/8	3.2
VOCs	67-66-3	Chloroform	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	74-87-3	Chloromethane	ug/kg	7.5	3.5	0/10	4.6	3.5	2.9	0/8	3.2
VOCs	10061-01-5	cis-1,3-Dichloropropene	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	75-09-2	Dichloromethane	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	100-41-4	Ethylbenzene	ug/kg	3.8	2.6	3/10	3.1	1.7	1.4	0/8	1.6
VOCs	591-78-6	Methyl N-Butyl Ketone	ug/kg	38	17	0/10	23	8.5	7.1	0/8	7.8

Appendix II-J2
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2005.

Chem Class	CAS	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
VOCs	100-42-5	Styrene (Monomer)	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	127-18-4	Tetrachloroethene	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	108-88-3	Toluene	ug/kg	8.5	3.6	1/10	4.8	1.7	1.4	0/8	1.6
VOCs	79-01-6	Trichloroethylene	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6
VOCs	75-01-4	Vinyl chloride	ug/kg	7.5	3.5	0/10	4.6	3.5	2.9	0/8	3.2
VOCs	1330-20-7	Xylenes, Total	ug/kg	15	6.8	1/10	9.0	5.5	3.5	1/8	4.2
SVOCs	95-95-4	2,4,5-Trichlorophenol	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	88-06-2	2,4,6-Trichlorophenol	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	120-83-2	2,4-Dichlorophenol	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	105-67-9	2,4-Dimethylphenol	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	51-28-5	2,4-Dinitrophenol	ug/kg	1850	1215	0/10	1427	1300	1013	0/8	1125
SVOCs	121-14-2	2,4-Dinitrotoluene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	606-20-2	2,6-Dinitrotoluene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	91-58-7	2-Chloronaphthalene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	95-57-8	2-Chlorophenol	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	91-57-6	2-Methylnaphthalene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	95-48-7	2-Methylphenol (o-Cresol)	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	88-74-4	2-Nitroaniline	ug/kg	1850	1215	0/10	1427	1300	1013	0/8	1125
SVOCs	88-75-5	2-Nitrophenol	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	91-94-1	3,3'-Dichlorobenzidine	ug/kg	700	466	0/10	544	500	389	0/8	432
SVOCs	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	99-09-2	3-Nitroaniline	ug/kg	1850	1215	0/10	1427	1300	1013	0/8	1125
SVOCs	534-52-1	4,6-Dinitro-2-methylphenol	ug/kg	1850	1215	0/10	1427	1300	1013	0/8	1125
SVOCs	101-55-3	4-Bromophenyl Phenyl Ether	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	59-50-7	4-Chloro-3-methylphenol	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	7005-72-3	4-Chlorophenyl Phenyl Ether	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	100-02-7	4-Nitrophenol	ug/kg	1850	1215	0/10	1427	1300	1013	0/8	1125
SVOCs	83-32-9	Acenaphthene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	208-96-8	Acenaphthylene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	120-12-7	Anthracene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	56-55-3	Benzo(a)anthracene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	50-32-8	Benzo(a)pyrene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	205-99-2	Benzo(b)fluoranthene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	191-24-2	Benzo(g,h,i)perylene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	207-08-9	Benzo(k)fluoranthene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	85-68-7	Benzyl Butyl Phthalate	ug/kg	360	235	0/10	276	250	194	0/8	216

Appendix II-J2
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2005.

Chem Class	CAS	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
SVOCs	111-91-1	bis(2-Chloroethoxy)methane	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	111-44-4	bis(2-Chloroethyl)ether	ug/kg	225	205	0/3	225	250	194	0/8	216
SVOCs	117-81-7	bis(2-Ethylhexyl)phthalate	ug/kg	360	218	1/10	272	250	194	0/8	216
SVOCs	86-74-8	Carbazole	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	218-01-9	Chrysene	ug/kg	360	235	0/10	276	220	166	1/8	207
SVOCs	53-70-3	Dibenzo(a,h)anthracene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	132-64-9	Dibenzofuran	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	84-66-2	Diethyl Phthalate	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	131-11-3	Dimethyl Phthalate	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	84-74-2	Di-n-butylphthalate	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	117-84-0	Di-n-octylphthalate	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	206-44-0	Fluoranthene	ug/kg	360	235	0/10	276	220	145	2/8	191
SVOCs	86-73-7	Fluorene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	118-74-1	Hexachlorobenzene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	87-68-3	Hexachlorobutadiene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	77-47-4	Hexachlorocyclopentadiene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	67-72-1	Hexachloroethane	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	193-39-5	Indeno(1,2,3-cd)pyrene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	78-59-1	Isophorone	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	91-20-3	Naphthalene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	98-95-3	Nitrobenzene	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	621-64-7	N-Nitroso-di-n-propylamine	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	86-30-6	N-Nitrosodiphenylamine	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	106-47-8	P-Chloroaniline	ug/kg	500	221	8/10	339	500	389	0/8	432
SVOCs	87-86-5	Pentachlorophenol	ug/kg	9.0	5.9	0/10	6.9				
SVOCs	85-01-8	Phenanthrene	ug/kg	360	235	0/10	276	220	167	1/8	207
SVOCs	108-95-2	Phenol	ug/kg	360	235	0/10	276	250	194	0/8	216
SVOCs	100-01-6	P-Nitroaniline	ug/kg	1850	1215	0/10	1427	1300	1013	0/8	1125
SVOCs	129-00-0	Pyrene	ug/kg	355	184	2/10	241	220	171	1/8	204
SVOCs	10061-02-6	trans-1,3-Dichloropropene	ug/kg	7.5	3.5	0/10	4.6	1.7	1.4	0/8	1.6

Appendix II-J2
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2005.

Chem Class	CAS	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
Pesticides	72-54-8	4,4'-DDD	ug/kg	37	9.2	2/10	18	2.5	1.9	0/8	2.2
Pesticides	72-55-9	4,4'-DDE	ug/kg	37	8.8	0/10	18	2.2	1.9	0/7	2.0
Pesticides	50-29-3	4,4'-DDT	ug/kg	37	8.8	0/10	18	2.2	1.8	0/6	2.0
Pesticides	309-00-2	Aldrin	ug/kg	19	4.5	0/10	9.1	1.3	1.0	0/8	1.1
Pesticides	319-84-6	alpha-BHC	ug/kg	19	4.5	0/10	9.1	1.3	1.0	0/8	1.1
Pesticides	5103-71-9	alpha-Chlordane	ug/kg	19	4.5	0/10	9.1	1.3	1.0	0/8	1.1
Pesticides	319-85-7	beta-BHC	ug/kg	19	4.5	0/10	9.1	1.3	1.0	0/8	1.1
Pesticides	319-86-8	delta-BHC	ug/kg	19	4.5	0/10	9.1	1.3	1.0	0/8	1.1
Pesticides	60-57-1	Dieldrin	ug/kg	37	8.8	0/10	18	2.5	1.9	0/8	2.2
Pesticides	959-98-8	Endosulfan I	ug/kg	19	4.5	0/10	9.1	1.3	1.0	0/8	1.1
Pesticides	33213-65-9	Endosulfan II	ug/kg	37	8.8	0/10	18	2.5	1.9	0/8	2.2
Pesticides	1031-07-8	Endosulfan Sulfate	ug/kg	37	8.8	0/10	18	2.5	1.9	0/8	2.2
Pesticides	72-20-8	Endrin	ug/kg	37	8.8	0/10	18	2.5	1.9	0/8	2.2
Pesticides	7421-93-4	Endrin Aldehyde	ug/kg	37	8.8	0/10	18	2.5	1.9	0/8	2.2
Pesticides	53494-70-5	Endrin Ketone	ug/kg	37	8.8	0/10	18	2.5	1.9	0/8	2.2
Pesticides	58-89-9	gamma-BHC (Lindane)	ug/kg	19	4.5	0/10	9.1	1.3	1.0	0/8	1.1
Pesticides	5103-74-2	gamma-Chlordane	ug/kg	19	4.5	0/10	9.1	1.3	1.0	0/8	1.1
Pesticides	76-44-8	Heptachlor	ug/kg	19	4.5	0/10	9.1	1.3	1.0	0/8	1.1
Pesticides	1024-57-3	Heptachlor Epoxide	ug/kg	19	4.5	0/10	9.1	1.3	1.0	0/8	1.1
Pesticides	72-43-5	Methoxychlor	ug/kg	185	45	0/10	91	13	10	0/8	11
Pesticides	8001-35-2	Toxaphene	ug/kg	1850	455	0/10	910	130	101	0/8	112
Herbicides	93-76-5	2,4,5-T	ug/kg	9.0	5.9	0/10	6.9				
Herbicides	93-72-1	2,4,5-TP (Silvex)	ug/kg	9.0	5.9	0/10	6.9				
Herbicides	94-75-7	2,4-D	ug/kg	120	32	4/10	56	5.2	5.2	1/1	
Herbicides	94-82-6	2,4-DB	ug/kg	9.0	5.9	0/10	6.9				
Herbicides	75-99-0	Dalapon	ug/kg	360	235	0/10	276				
Herbicides	1918-00-9	Dicamba	ug/kg	9.0	5.9	0/10	6.9				
Herbicides	120-36-5	Dichlorprop	ug/kg	60	44	4/10	56	23	18	5/5	22
Herbicides	88-85-7	Dinoseb	ug/kg	360	235	0/10	276	250	194	0/8	216
Herbicides	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	ug/kg	2200	1420	0/10	1672				
Herbicides	93-65-2	MCPP	ug/kg	2200	1420	0/10	1672	460	415	2/2	503

Appendix II-J2

Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2005.

Chem Class	CAS	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
Metals	7429-90-5	Aluminum	mg/kg	12000	3910	10/10	6639	5900	1689	8/8	2933
Metals	7440-36-0	Antimony	mg/kg	2.1	1.3	0/10	1.6	1.5	1.2	0/8	1.3
Metals	7440-38-2	Arsenic	mg/kg	6.7	3.0	10/10	4.2	5.6	2.2	8/8	3.2
Metals	7440-39-3	Barium	mg/kg	180	71	10/10	108	140	42	8/8	74
Metals	7440-41-7	Beryllium	mg/kg	0.65	0.23	10/10	0.37	0.48	0.26	1/8	0.32
Metals	7440-43-9	Cadmium	mg/kg	1.7	0.64	6/10	0.97	1.2	0.38	1/8	0.61
Metals	7440-70-2	Calcium	mg/kg	11000	4560	10/10	6917	8200	2790	8/8	4835
Metals	7440-47-3	Chromium	mg/kg	17	6.7	10/10	10	11	4.7	8/8	6.8
Metals	7440-48-4	Cobalt	mg/kg	7.7	4.1	10/10	5.3	6.0	3.1	8/8	4.0
Metals	7440-50-8	Copper	mg/kg	18	7.1	10/10	11	12	2.9	8/8	5.6
Metals	7439-89-6	Iron	mg/kg	17000	7270	10/10	10621	12000	5088	8/8	7303
Metals	7439-92-1	Lead	mg/kg	29	11	10/10	17	12	4.4	8/8	7.0
Metals	7439-95-4	Magnesium	mg/kg	4200	1794	10/10	2637	3400	1246	8/8	2007
Metals	7439-96-5	Manganese	mg/kg	770	291	10/10	457	500	185	8/8	279
Metals	7439-97-6	Mercury	mg/kg	0.046	0.021	8/10	0.029	0.13	0.030	4/8	0.061
Metals	7440-02-0	Nickel	mg/kg	19	9.5	10/10	13	15	7.2	8/8	9.6
Metals	7440-09-7	Potassium	mg/kg	1800	593	10/10	987	820	256	8/8	435
Metals	7782-49-2	Selenium	mg/kg	2.7	1.7	0/10	2.0	0.65	0.54	0/8	0.59
Metals	7440-22-4	Silver	mg/kg	1.1	0.66	0/10	0.78	0.65	0.54	0/8	0.59
Metals	7440-23-5	Sodium	mg/kg	180	105	0/10	133	78	40	8/8	53
Metals	7440-28-0	Thallium	mg/kg	2.7	1.7	0/10	2.0	0.65	0.54	0/8	0.59
Metals	7440-62-2	Vanadium	mg/kg	29	11	10/10	17	19	6.4	8/8	10
Metals	7440-66-6	Zinc	mg/kg	540	195	10/10	316	89	21	7/8	41

Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Appendix II-J3

Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2007

Appendix II-J3

Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2007.

Chem Class	CAS	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
VOCs	71-55-6	1,1,1-Trichloroethane	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	79-34-5	1,1,2,2-Tetrachloroethane	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	79-00-5	1,1,2-Trichloroethane	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	75-34-3	1,1-Dichloroethane	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	75-35-4	1,1-Dichloroethylene	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	120-82-1	1,2,4-Trichlorobenzene	ug/kg	290	225	0/3	289	250	194	0/8	216
VOCs	95-50-1	1,2-Dichlorobenzene	ug/kg	195	178	1/3	206	250	194	0/8	216
VOCs	107-06-2	1,2-Dichloroethane	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	78-87-5	1,2-Dichloropropane	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	541-73-1	1,3-Dichlorobenzene	ug/kg	195	185	1/3	200	250	194	0/8	216
VOCs	106-46-7	1,4-Dichlorobenzene	ug/kg	1200	528	1/3	1187	250	194	0/8	216
VOCs	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg	290	225	0/3	289	250	194	0/8	216
VOCs	78-93-3	2-Butanone (MEK)	ug/kg	46	28	1/3	46	8.5	6.7	1/8	7.8
VOCs	108-10-1	4-Methyl-2-pentanone (MIBK)	ug/kg	37	19	0/3	36	8.5	7.1	0/8	7.8
VOCs	67-64-1	Acetone	ug/kg	300	111	3/3	296	98	32	7/8	58
VOCs	71-43-2	Benzene	ug/kg	27	10	1/3	27	1.7	1.4	0/8	1.6
VOCs	75-27-4	Bromodichloromethane	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	75-25-2	Bromoform	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	74-83-9	Bromomethane	ug/kg	7.5	3.8	0/3	7.4	3.5	2.9	0/8	3.2
VOCs	75-15-0	Carbon Disulfide	ug/kg	20	7.8	2/3	20	1.7	1.4	0/8	1.6
VOCs	56-23-5	Carbon Tetrachloride	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	108-90-7	Chlorobenzene	ug/kg	19000	6334	3/3	18746	1.7	1.4	0/8	1.6
VOCs	124-48-1	Chlorodibromomethane	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	75-00-3	Chloroethane	ug/kg	7.5	3.8	0/3	7.4	3.5	2.9	0/8	3.2
VOCs	67-66-3	Chloroform	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	74-87-3	Chloromethane	ug/kg	7.5	3.8	0/3	7.4	3.5	2.9	0/8	3.2
VOCs	10061-01-5	cis-1,3-Dichloropropene	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	75-09-2	Dichloromethane	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	100-41-4	Ethylbenzene	ug/kg	8.4	4.1	1/3	8.3	1.7	1.4	0/8	1.6
VOCs	591-78-6	Methyl N-Butyl Ketone	ug/kg	37	19	0/3	36	8.5	7.1	0/8	7.8
VOCs	100-42-5	Styrene (Monomer)	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6

Appendix II-J3

Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2007.

Chem Class	CAS	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
VOCs	127-18-4	Tetrachloroethene	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	108-88-3	Toluene	ug/kg	200	68	1/3	197	1.7	1.4	0/8	1.6
VOCs	79-01-6	Trichloroethylene	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6
VOCs	75-01-4	Vinyl chloride	ug/kg	7.5	3.8	0/3	7.4	3.5	2.9	0/8	3.2
VOCs	1330-20-7	Xylenes, Total	ug/kg	18	8.6	1/3	18	5.5	3.5	1/8	4.2
SVOCs	95-95-4	2,4,5-Trichlorophenol	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	88-06-2	2,4,6-Trichlorophenol	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	120-83-2	2,4-Dichlorophenol	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	105-67-9	2,4-Dimethylphenol	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	51-28-5	2,4-Dinitrophenol	ug/kg	1500	1150	0/3	1494	1300	1013	0/8	1125
SVOCs	121-14-2	2,4-Dinitrotoluene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	606-20-2	2,6-Dinitrotoluene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	91-58-7	2-Chloronaphthalene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	95-57-8	2-Chlorophenol	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	91-57-6	2-Methylnaphthalene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	95-48-7	2-Methylphenol (o-Cresol)	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	88-74-4	2-Nitroaniline	ug/kg	1500	1150	0/3	1494	1300	1013	0/8	1125
SVOCs	88-75-5	2-Nitrophenol	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	91-94-1	3,3'-Dichlorobenzidine	ug/kg	600	453	0/3	597	500	389	0/8	432
SVOCs	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg	195	162	1/3	222	250	194	0/8	216
SVOCs	99-09-2	3-Nitroaniline	ug/kg	1500	1150	0/3	1494	1300	1013	0/8	1125
SVOCs	534-52-1	4,6-Dinitro-2-methylphenol	ug/kg	1500	1150	0/3	1494	1300	1013	0/8	1125
SVOCs	101-55-3	4-Bromophenyl Phenyl Ether	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	59-50-7	4-Chloro-3-methylphenol	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	7005-72-3	4-Chlorophenyl Phenyl Ether	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	100-02-7	4-Nitrophenol	ug/kg	1500	1150	0/3	1494	1300	1013	0/8	1125
SVOCs	83-32-9	Acenaphthene	ug/kg	290	171	1/3	318	250	194	0/8	216
SVOCs	208-96-8	Acenaphthylene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	120-12-7	Anthracene	ug/kg	190	97	2/3	189	250	194	0/8	216
SVOCs	56-55-3	Benzo(a)anthracene	ug/kg	195	168	1/3	216	250	194	0/8	216
SVOCs	50-32-8	Benzo(a)pyrene	ug/kg	195	156	1/3	227	250	194	0/8	216
SVOCs	205-99-2	Benzo(b)fluoranthene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	191-24-2	Benzo(g,h,i)perylene	ug/kg	195	156	1/3	227	250	194	0/8	216
SVOCs	207-08-9	Benzo(k)fluoranthene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	85-68-7	Benzyl Butyl Phthalate	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	111-91-1	bis(2-Chloroethoxy)methane	ug/kg	290	225	0/3	289	250	194	0/8	216

Appendix II-J3

Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2007.

Chem Class	CAS	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
SVOCs	111-44-4	bis(2-Chloroethyl)ether	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	117-81-7	bis(2-Ethylhexyl)phthalate	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	86-74-8	Carbazole	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	218-01-9	Chrysene	ug/kg	190	121	2/3	205	220	166	1/8	207
SVOCs	53-70-3	Dibenzo(a,h)anthracene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	132-64-9	Dibenzofuran	ug/kg	290	170	1/3	319	250	194	0/8	216
SVOCs	84-66-2	Diethyl Phthalate	ug/kg	290	183	1/3	311	250	194	0/8	216
SVOCs	131-11-3	Dimethyl Phthalate	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	84-74-2	Di-n-butylphthalate	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	117-84-0	Di-n-octylphthalate	ug/kg	195	162	1/3	222	250	194	0/8	216
SVOCs	206-44-0	Fluoranthene	ug/kg	260	193	2/3	267	220	145	2/8	191
SVOCs	86-73-7	Fluorene	ug/kg	290	176	1/3	313	250	194	0/8	216
SVOCs	118-74-1	Hexachlorobenzene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	87-68-3	Hexachlorobutadiene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	77-47-4	Hexachlorocyclopentadiene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	67-72-1	Hexachloroethane	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	193-39-5	Indeno(1,2,3-cd)pyrene	ug/kg	195	152	1/3	231	250	194	0/8	216
SVOCs	78-59-1	Isophorone	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	91-20-3	Naphthalene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	98-95-3	Nitrobenzene	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	621-64-7	N-Nitroso-di-n-propylamine	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	86-30-6	N-Nitrosodiphenylamine	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	106-47-8	P-Chloroaniline	ug/kg	1900	887	1/3	1880	500	389	0/8	432
SVOCs	87-86-5	Pentachlorophenol	ug/kg	3.7	2.9	0/3	3.7				
SVOCs	85-01-8	Phenanthrene	ug/kg	220	193	2/3	222	220	167	1/8	207
SVOCs	108-95-2	Phenol	ug/kg	290	225	0/3	289	250	194	0/8	216
SVOCs	100-01-6	P-Nitroaniline	ug/kg	1500	1150	0/3	1494	1300	1013	0/8	1125
SVOCs	129-00-0	Pyrene	ug/kg	220	167	2/3	243	220	171	1/8	204
SVOCs	10061-02-6	trans-1,3-Dichloropropene	ug/kg	7.5	3.8	0/3	7.4	1.7	1.4	0/8	1.6

Appendix II-J3

Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2007.

Chem Class	CAS	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
Pesticides	72-54-8	4,4'-DDD	ug/kg	8.8	4.2	1/3	8.7	2.5	1.9	0/8	2.2
Pesticides	72-55-9	4,4'-DDE	ug/kg	2.9	2.2	0/3	2.9	2.2	1.9	0/7	2.0
Pesticides	50-29-3	4,4'-DDT	ug/kg	2.9	2.2	0/3	2.9	2.2	1.8	0/6	2.0
Pesticides	309-00-2	Aldrin	ug/kg	1.5	1.2	0/3	1.5	1.3	1.0	0/8	1.1
Pesticides	319-84-6	alpha-BHC	ug/kg	1.5	1.2	0/3	1.5	1.3	1.0	0/8	1.1
Pesticides	5103-71-9	alpha-Chlordane	ug/kg	1.5	1.2	0/3	1.5	1.3	1.0	0/8	1.1
Pesticides	319-85-7	beta-BHC	ug/kg	1.5	1.2	0/3	1.5	1.3	1.0	0/8	1.1
Pesticides	319-86-8	delta-BHC	ug/kg	3.0	2.3	0/3	3.0	1.3	1.0	0/8	1.1
Pesticides	60-57-1	Dieldrin	ug/kg	2.0	1.6	1/3	2.2	2.5	1.9	0/8	2.2
Pesticides	959-98-8	Endosulfan I	ug/kg	1.5	1.2	0/3	1.5	1.3	1.0	0/8	1.1
Pesticides	33213-65-9	Endosulfan II	ug/kg	2.9	2.2	0/3	2.9	2.5	1.9	0/8	2.2
Pesticides	1031-07-8	Endosulfan Sulfate	ug/kg	2.9	2.2	0/3	2.9	2.5	1.9	0/8	2.2
Pesticides	72-20-8	Endrin	ug/kg	2.9	2.2	0/3	2.9	2.5	1.9	0/8	2.2
Pesticides	7421-93-4	Endrin Aldehyde	ug/kg	2.9	2.2	0/3	2.9	2.5	1.9	0/8	2.2
Pesticides	53494-70-5	Endrin Ketone	ug/kg	2.9	2.2	0/3	2.9	2.5	1.9	0/8	2.2
Pesticides	58-89-9	gamma-BHC (Lindane)	ug/kg	1.5	1.2	0/3	1.5	1.3	1.0	0/8	1.1
Pesticides	5103-74-2	gamma-Chlordane	ug/kg	1.5	1.2	0/3	1.5	1.3	1.0	0/8	1.1
Pesticides	76-44-8	Heptachlor	ug/kg	1.5	1.2	0/3	1.5	1.3	1.0	0/8	1.1
Pesticides	1024-57-3	Heptachlor Epoxide	ug/kg	1.5	1.2	0/3	1.5	1.3	1.0	0/8	1.1
Pesticides	72-43-5	Methoxychlor	ug/kg	15	12	0/3	15	13	10	0/8	11
Pesticides	8001-35-2	Toxaphene	ug/kg	150	115	0/3	149	130	101	0/8	112
Herbicides	93-76-5	2,4,5-T	ug/kg	7.5	5.7	0/3	7.5				
Herbicides	93-72-1	2,4,5-TP (Silvex)	ug/kg	7.5	5.7	0/3	7.5				
Herbicides	94-75-7	2,4-D	ug/kg	7.5	5.7	0/3	7.5	5.2	5.2	1/1	
Herbicides	94-82-6	2,4-DB	ug/kg	7.5	5.7	0/3	7.5				
Herbicides	75-99-0	Dalapon	ug/kg	150	115	0/3	149				
Herbicides	1918-00-9	Dicamba	ug/kg	7.5	5.7	0/3	7.5				
Herbicides	120-36-5	Dichlorprop	ug/kg	56	22	1/3	55	23	18	5/5	22
Herbicides	88-85-7	Dinoseb	ug/kg	290	225	0/3	289	250	194	0/8	216
Herbicides	94-74-6	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	ug/kg	1750	1350	0/3	1742				
Herbicides	93-65-2	MCPP	ug/kg	1750	1350	0/3	1742	460	415	2/2	503

Appendix II-J3

Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Sediments in 2007.

Chem Class	CAS	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
				Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
Metals	7429-90-5	Aluminum	mg/kg	8700	3563	3/3	8597	5900	1689	8/8	2933
Metals	7440-36-0	Antimony	mg/kg	1.1	0.96	1/3	1.1	1.5	1.2	0/8	1.3
Metals	7440-38-2	Arsenic	mg/kg	4.3	2.4	3/3	4.3	5.6	2.2	8/8	3.2
Metals	7440-39-3	Barium	mg/kg	160	74	3/3	159	140	42	8/8	74
Metals	7440-41-7	Beryllium	mg/kg	0.50	0.22	3/3	0.49	0.48	0.26	1/8	0.32
Metals	7440-43-9	Cadmium	mg/kg	2.0	0.84	1/3	2.0	1.2	0.38	1/8	0.61
Metals	7440-70-2	Calcium	mg/kg	14000	5633	3/3	13848	8200	2790	8/8	4835
Metals	7440-47-3	Chromium	mg/kg	17	7.8	3/3	17	11	4.7	8/8	6.8
Metals	7440-48-4	Cobalt	mg/kg	6.3	3.9	3/3	6.3	6.0	3.1	8/8	4.0
Metals	7440-50-8	Copper	mg/kg	22	8.2	3/3	22	12	2.9	8/8	5.6
Metals	7439-89-6	Iron	mg/kg	15000	7733	3/3	14858	12000	5088	8/8	7303
Metals	7439-92-1	Lead	mg/kg	27	12	3/3	27	12	4.4	8/8	7.0
Metals	7439-95-4	Magnesium	mg/kg	4100	1877	3/3	4063	3400	1246	8/8	2007
Metals	7439-96-5	Manganese	mg/kg	440	190	3/3	435	500	185	8/8	279
Metals	7439-97-6	Mercury	mg/kg	0.041	0.021	1/3	0.041	0.13	0.030	4/8	0.061
Metals	7440-02-0	Nickel	mg/kg	16	9.6	3/3	16	15	7.2	8/8	9.6
Metals	7440-09-7	Potassium	mg/kg	1500	623	3/3	1482	820	256	8/8	435
Metals	7782-49-2	Selenium	mg/kg	2.0	1.5	0/3	1.9	0.65	0.54	0/8	0.59
Metals	7440-22-4	Silver	mg/kg	0.80	0.62	0/3	0.80	0.65	0.54	0/8	0.59
Metals	7440-23-5	Sodium	mg/kg	120	78	0/3	119	78	40	8/8	53
Metals	7440-28-0	Thallium	mg/kg	2.0	1.5	0/3	1.9	0.65	0.54	0/8	0.59
Metals	7440-62-2	Vanadium	mg/kg	26	12	3/3	26	19	6.4	8/8	10
Metals	7440-66-6	Zinc	mg/kg	370	155	3/3	369	89	21	7/8	41

Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Appendix II-K1

Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2002

Appendix II-K1
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2002.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
VOCs	71-55-6	T	1,1,1-Trichloroethane	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	79-34-5	T	1,1,2,2-Tetrachloroethane	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	79-00-5	T	1,1,2-Trichloroethane	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	75-34-3	T	1,1-Dichloroethane	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	75-35-4	T	1,1-Dichloroethylene	ug/l	0.50	0.49	3/39	0.50	0.50	0.50	0/8	NA
VOCs	120-82-1	T	1,2,4-Trichlorobenzene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
VOCs	95-50-1	T	1,2-Dichlorobenzene	ug/l	40	5.8	2/39	7.6	5.0	5.0	0/8	NA
VOCs	107-06-2	T	1,2-Dichloroethane	ug/l	0.70	0.45	11/39	0.49	0.50	0.50	0/8	NA
VOCs	540-59-0	T	1,2-Dichloroethene (total)	ug/l	1.0	0.94	3/39	1.0	1.0	1.0	0/8	NA
VOCs	78-87-5	T	1,2-Dichloropropane	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	541-73-1	T	1,3-Dichlorobenzene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
VOCs	106-46-7	T	1,4-Dichlorobenzene	ug/l	5.0	5.0	1/39	5.0	5.0	5.0	0/8	NA
VOCs	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
VOCs	78-93-3	T	2-Butanone (MEK)	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
VOCs	108-10-1	T	4-Methyl-2-pentanone (MIBK)	ug/l	5.0	5.0	1/39	5.0	5.0	5.0	0/8	NA
VOCs	67-64-1	T	Acetone	ug/l	40	13	1/39	15	13	13	0/8	NA
VOCs	71-43-2	T	Benzene	ug/l	4.5	0.55	14/39	0.75	0.50	0.50	0/8	NA
VOCs	75-27-4	T	Bromodichloromethane	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	75-25-2	T	Bromoform	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	74-83-9	T	Bromomethane	ug/l	0.50	0.50	0/38	NA	0.50	0.50	0/8	NA
VOCs	75-15-0	T	Carbon Disulfide	ug/l	0.69	0.48	5/39	0.51	0.50	0.50	0/8	NA
VOCs	56-23-5	T	Carbon Tetrachloride	ug/l	0.50	0.49	1/39	0.51	0.50	0.50	0/8	NA
VOCs	108-90-7	T	Chlorobenzene	ug/l	56	3.2	28/39	5.9	0.50	0.50	0/8	NA
VOCs	124-48-1	T	Chlorodibromomethane	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	75-00-3	T	Chloroethane	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	67-66-3	T	Chloroform	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	74-87-3	T	Chloromethane	ug/l	0.96	0.50	5/39	0.53	0.50	0.47	1/8	0.53
VOCs	10061-01-5	T	cis-1,3-Dichloropropene	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	75-09-2	T	Dichloromethane	ug/l	2.5	2.5	0/39	NA	2.5	2.5	0/8	NA
VOCs	100-41-4	T	Ethylbenzene	ug/l	1.3	0.52	1/39	0.56	0.50	0.50	0/8	NA
VOCs	591-78-6	T	Methyl N-Butyl Ketone	ug/l	5.0	4.9	1/39	5.1	5.0	5.0	0/8	NA
VOCs	100-42-5	T	Styrene (Monomer)	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	127-18-4	T	Tetrachloroethene	ug/l	0.50	0.50	1/39	0.50	0.50	0.50	0/8	NA
VOCs	108-88-3	T	Toluene	ug/l	4.5	0.61	10/39	0.81	0.50	0.50	0/8	NA
VOCs	79-01-6	T	Trichloroethylene	ug/l	0.58	0.50	1/39	0.51	0.50	0.50	0/8	NA
VOCs	75-01-4	T	Vinyl chloride	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
VOCs	1330-20-7	T	Xylenes, Total	ug/l	3.0	1.0	3/39	1.1	1.0	1.0	0/8	NA

Appendix II-K1
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2002.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
SVOCs	95-95-4	T	2,4,5-Trichlorophenol	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	88-06-2	T	2,4,6-Trichlorophenol	ug/l	17	5.3	1/39	5.9	5.0	5.0	0/8	NA
SVOCs	120-83-2	T	2,4-Dichlorophenol	ug/l	69	5.9	11/39	9.2	5.0	5.0	0/8	NA
SVOCs	105-67-9	T	2,4-Dimethylphenol	ug/l	8.3	5.1	1/39	5.3	5.0	5.0	0/8	NA
SVOCs	51-28-5	T	2,4-Dinitrophenol	ug/l	25	25	0/39	NA	25	25	0/8	NA
SVOCs	121-14-2	T	2,4-Dinitrotoluene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	606-20-2	T	2,6-Dinitrotoluene	ug/l	17	5.3	1/39	5.9	5.0	5.0	0/8	NA
SVOCs	91-58-7	T	2-Chloronaphthalene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	95-57-8	T	2-Chlorophenol	ug/l	31	5.3	6/39	6.6	5.0	5.0	0/8	NA
SVOCs	91-57-6	T	2-Methylnaphthalene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	95-48-7	T	2-Methylphenol (o-Cresol)	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	88-74-4	T	2-Nitroaniline	ug/l	25	25	0/39	NA	25	25	0/8	NA
SVOCs	88-75-5	T	2-Nitrophenol	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	91-94-1	T	3,3'-Dichlorobenzidine	ug/l	10	10	0/39	NA	10	10	0/8	NA
SVOCs	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	27	5.5	2/39	6.6	5.0	5.0	0/8	NA
SVOCs	99-09-2	T	3-Nitroaniline	ug/l	25	25	0/39	NA	25	25	0/8	NA
SVOCs	534-52-1	T	4,6-Dinitro-2-methylphenol	ug/l	25	25	0/39	NA	25	25	0/8	NA
SVOCs	101-55-3	T	4-Bromophenyl Phenyl Ether	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	59-50-7	T	4-Chloro-3-methylphenol	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	7005-72-3	T	4-Chlorophenyl Phenyl Ether	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	100-02-7	T	4-Nitrophenol	ug/l	25	25	0/39	NA	25	25	0/8	NA
SVOCs	83-32-9	T	Acenaphthene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	208-96-8	T	Acenaphthylene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	120-12-7	T	Anthracene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	56-55-3	T	Benzo(a)anthracene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	50-32-8	T	Benzo(a)pyrene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	205-99-2	T	Benzo(b)fluoranthene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	191-24-2	T	Benzo(g,h,i)perylene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	207-08-9	T	Benzo(k)fluoranthene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	85-68-7	T	Benzyl Butyl Phthalate	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	111-91-1	T	bis(2-Chloroethoxy)methane	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	111-44-4	T	bis(2-Chloroethyl)ether	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	117-81-7	T	bis(2-Ethylhexyl)phthalate	ug/l	5.0	4.9	1/39	5.1	14	6.1	1/8	8.3
SVOCs	86-74-8	T	Carbazole	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	218-01-9	T	Chrysene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	53-70-3	T	Dibenzo(a,h)anthracene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	132-64-9	T	Dibenzofuran	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA

Appendix II-K1
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2002.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
SVOCs	84-66-2	T	Diethyl Phthalate	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	131-11-3	T	Dimethyl Phthalate	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	84-74-2	T	Di-n-butylphthalate	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	117-84-0	T	Di-n-octylphthalate	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	206-44-0	T	Fluoranthene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	86-73-7	T	Fluorene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	118-74-1	T	Hexachlorobenzene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	87-68-3	T	Hexachlorobutadiene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	77-47-4	T	Hexachlorocyclopentadiene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	67-72-1	T	Hexachloroethane	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	193-39-5	T	Indeno(1,2,3-cd)pyrene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	78-59-1	T	Isophorone	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	91-20-3	T	Naphthalene	ug/l	21	5.4	1/39	6.2	5.0	5.0	0/8	NA
SVOCs	98-95-3	T	Nitrobenzene	ug/l	5.0	4.9	1/39	5.1	5.0	5.0	0/8	NA
SVOCs	621-64-7	T	N-Nitroso-di-n-propylamine	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	86-30-6	T	N-Nitrosodiphenylamine	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	106-47-8	T	P-Chloroaniline	ug/l	160	12	17/39	20	10	10	0/8	NA
SVOCs	87-86-5	T	Pentachlorophenol	ug/l	1.9	0.54	1/39	0.61	0.50	0.48	1/8	0.52
SVOCs	85-01-8	T	Phenanthrene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	108-95-2	T	Phenol	ug/l	14	5.4	10/39	6.1	5.0	5.0	0/8	NA
SVOCs	100-01-6	T	P-Nitroaniline	ug/l	25	25	0/39	NA	25	25	0/8	NA
SVOCs	129-00-0	T	Pyrene	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
SVOCs	10061-02-6	T	trans-1,3-Dichloropropene	ug/l	0.50	0.50	0/39	NA	0.50	0.50	0/8	NA
Pesticides	72-54-8	T	4,4'-DDD	ug/l	0.050	0.050	0/38	NA	0.050	0.050	0/8	NA
Pesticides	72-55-9	T	4,4'-DDE	ug/l	0.050	0.050	0/38	NA	0.050	0.050	0/8	NA
Pesticides	50-29-3	T	4,4'-DDT	ug/l	0.050	0.050	0/38	NA	0.050	0.050	0/8	NA
Pesticides	309-00-2	T	Aldrin	ug/l	0.025	0.025	0/38	NA	0.025	0.025	0/8	NA
Pesticides	319-84-6	T	alpha-BHC	ug/l	0.025	0.025	0/38	NA	0.025	0.025	0/8	NA
Pesticides	5103-71-9	T	alpha-Chlordane	ug/l	0.025	0.025	0/38	NA	0.025	0.025	0/8	NA
Pesticides	319-85-7	T	beta-BHC	ug/l	0.025	0.024	2/38	0.025	0.025	0.025	0/8	NA
Pesticides	319-86-8	T	delta-BHC	ug/l	0.025	0.025	0/38	NA	0.025	0.025	0/8	NA
Pesticides	60-57-1	T	Dieldrin	ug/l	0.050	0.050	0/38	NA	0.050	0.050	0/8	NA
Pesticides	959-98-8	T	Endosulfan I	ug/l	0.025	0.025	0/38	NA	0.025	0.025	0/8	NA
Pesticides	33213-65-9	T	Endosulfan II	ug/l	0.050	0.050	0/38	NA	0.050	0.050	0/8	NA
Pesticides	1031-07-8	T	Endosulfan Sulfate	ug/l	0.050	0.050	0/38	NA	0.050	0.050	0/8	NA
Pesticides	72-20-8	T	Endrin	ug/l	0.050	0.050	0/38	NA	0.050	0.050	0/8	NA
Pesticides	7421-93-4	T	Endrin Aldehyde	ug/l	0.050	0.050	0/38	NA	0.050	0.050	0/8	NA

Appendix II-K1
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2002.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
Pesticides	53494-70-5	T	Endrin Ketone	ug/l	0.050	0.048	2/38	0.051	0.050	0.026	6/8	0.037
Pesticides	58-89-9	T	gamma-BHC (Lindane)	ug/l	0.025	0.025	0/38	NA	0.025	0.025	0/8	NA
Pesticides	5103-74-2	T	gamma-Chlordane	ug/l	0.025	0.025	0/38	NA	0.025	0.025	0/8	NA
Pesticides	76-44-8	T	Heptachlor	ug/l	0.025	0.025	0/38	NA	0.025	0.025	0/8	NA
Pesticides	1024-57-3	T	Heptachlor Epoxide	ug/l	0.025	0.025	0/38	NA	0.025	0.025	0/8	NA
Pesticides	72-43-5	T	Methoxychlor	ug/l	0.25	0.25	0/38	NA	0.25	0.25	0/8	NA
Pesticides	8001-35-2	T	Toxaphene	ug/l	2.5	2.5	0/38	NA	2.5	2.5	0/8	NA
Herbicides	93-76-5	T	2,4,5-T	ug/l	0.30	0.25	1/39	0.25	0.25	0.25	0/8	NA
Herbicides	93-72-1	T	2,4,5-TP (Silvex)	ug/l	0.25	0.25	0/39	NA	0.25	0.25	0/8	NA
Herbicides	94-75-7	T	2,4-D	ug/l	29	2.0	25/39	3.4	0.25	0.25	0/8	NA
Herbicides	94-82-6	T	2,4-DB	ug/l	0.25	0.25	0/39	NA	0.25	0.25	0/8	NA
Herbicides	75-99-0	T	Dalapon	ug/l	60	60	0/39	NA	60	60	0/8	NA
Herbicides	1918-00-9	T	Dicamba	ug/l	0.60	0.60	0/39	NA	0.60	0.60	0/8	NA
Herbicides	120-36-5	T	Dichlorprop	ug/l	3.0	2.3	12/39	2.6	3.0	3.0	0/8	NA
Herbicides	88-85-7	T	Dinoseb	ug/l	5.0	5.0	0/39	NA	5.0	5.0	0/8	NA
Herbicides	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	ug/l	60	59	1/39	61	60	60	0/8	NA
Herbicides	93-65-2	T	MCPP	ug/l	60	60	1/39	60	60	60	0/8	NA
PCBs	2051-24-3	T	Decachlorobiphenyl	ug/l	0.25	0.25	0/39	NA	0.25	0.25	0/8	NA
PCBs	C-DICHLOROBI	T	Dichlorobiphenyl	ug/l	0.050	0.050	0/39	NA	0.050	0.050	0/8	NA
PCBs	C-HEPTACHLOR	T	Heptachlorobiphenyl	ug/l	0.15	0.15	0/39	NA	0.15	0.15	0/8	NA
PCBs	C-HEXACHLORO	T	Hexachlorobiphenyl	ug/l	0.10	0.10	0/39	NA	0.10	0.10	0/8	NA
PCBs	C-MONOCHLORO	T	Monochlorobiphenyl	ug/l	0.050	0.050	0/39	NA	0.050	0.050	0/8	NA
PCBs	C-NONACHLORO	T	Nonachlorobiphenyl	ug/l	0.25	0.25	0/39	NA	0.25	0.25	0/8	NA
PCBs	C-OCTA-BIPHE	T	Octachlorobiphenyl	ug/l	0.15	0.15	0/39	NA	0.15	0.15	0/8	NA
PCBs	C-PENTBIPHEN	T	Pentachlorobiphenyl	ug/l	0.10	0.10	0/39	NA	0.10	0.10	0/8	NA
PCBs	C-TETRACHLOR	T	Tetrachlorobiphenyl	ug/l	0.10	0.10	0/39	NA	0.10	0.10	0/8	NA
PCBs	C-TRICHLOROB	T	Trichlorobiphenyl	ug/l	0.050	0.050	0/39	NA	0.050	0.050	0/8	NA
Dioxins	35822-46-9	T	1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/l	0.0000013	0.0000010	0/5	0.0000013	0.0000011	0.00000093	0/2	0.0000013
Dioxins	67562-39-4	T	1,2,3,4,6,7,8-HpCDF	ug/l	0.00000065	0.00000050	0/5	0.00000059	0.00000070	0.00000057	0/2	0.00000082
Dioxins	55673-89-7	T	1,2,3,4,7,8,9-HpCDF	ug/l	0.00000060	0.00000036	0/5	0.00000048	0.00000070	0.00000060	0/2	0.00000080
Dioxins	39227-28-6	T	1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	ug/l	0.00000065	0.00000047	0/5	0.00000058	0.00000060	0.00000052	0/2	0.00000068
Dioxins	70648-26-9	T	1,2,3,4,7,8-HxCDF	ug/l	0.00000048	0.00000043	0/5	0.00000046	0.00000090	0.00000064	0/2	0.0000012
Dioxins	57653-85-7	T	1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	ug/l	0.00000060	0.00000044	0/5	0.00000054	0.00000055	0.00000048	0/2	0.00000062
Dioxins	57117-44-9	T	1,2,3,6,7,8-HxCDF	ug/l	0.00000040	0.00000034	0/5	0.00000039	0.00000055	0.00000044	0/2	0.00000065

Appendix II-K1
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2002.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
Dioxins	19408-74-3	T	1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	ug/l	0.00000060	0.00000044	0/5	0.00000053	0.00000080	0.00000059	0/2	0.0000010
Dioxins	72918-21-9	T	1,2,3,7,8,9-HxCDF	ug/l	0.00000050	0.00000042	0/5	0.00000048	0.00000080	0.00000061	0/2	0.00000098
Dioxins	57117-41-6	T	1,2,3,7,8-Pentachlorodibenzofuran	ug/l	0.00000045	0.00000039	0/5	0.00000045	0.00000085	0.00000059	0/2	0.0000011
Dioxins	40321-76-4	T	1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	ug/l	0.00000095	0.00000078	0/5	0.00000091	0.0000011	0.00000090	0/2	0.0000013
Dioxins	60851-34-5	T	2,3,4,6,7,8-HxCDF	ug/l	0.00000045	0.00000039	0/5	0.00000044	0.00000060	0.00000049	0/2	0.00000071
Dioxins	57117-31-4	T	2,3,4,7,8-PeCDF	ug/l	0.00000043	0.00000037	0/5	0.00000043	0.00000080	0.00000056	0/2	0.0000010
Dioxins	1746-01-6	T	2,3,7,8-TCDD	ug/l	0.00000044	0.00000038	0/5	0.00000043	0.00000047	0.00000043	0/2	0.00000050
Dioxins	51207-31-9	T	2,3,7,8-Tetrachlorodibenzofuran	ug/l	0.0000010	0.00000063	0/5	0.00000083	0.0000012	0.00000098	0/2	0.0000014
Dioxins	3268-87-9	T	OCDD	ug/l	0.000022	0.000021	0/5	0.000022	0.000020	0.000018	0/2	0.000022
Dioxins	39001-02-0	T	OCDF	ug/l	0.0000017	0.00000098	0/5	0.0000013	0.0000015	0.0000010	0/2	0.0000019
Dioxins	37871-00-4	T	Total HpCDD	ug/l	0.0000015	0.0000012	0/5	0.0000014	0.0000011	0.00000093	0/2	0.0000013
Dioxins	38998-75-3	T	Total HpCDF	ug/l	0.00000065	0.00000052	0/5	0.00000062	0.00000070	0.00000060	0/2	0.00000080
Dioxins	34465-46-8	T	Total HxCDD	ug/l	0.00000090	0.00000063	0/5	0.00000078	0.00000090	0.00000085	0/2	0.00000095
Dioxins	55684-94-1	T	Total HxCDF	ug/l	0.00000050	0.00000046	0/5	0.00000049	0.00000090	0.00000066	0/2	0.0000011
Dioxins	36088-22-9	T	Total PeCDD	ug/l	0.0000013	0.0000011	0/5	0.0000012	0.0000011	0.00000090	0/2	0.0000013
Dioxins	30402-15-4	T	Total PeCDF	ug/l	0.00000075	0.00000059	0/5	0.00000071	0.00000090	0.00000069	0/2	0.0000011
Dioxins	41903-57-5	T	Total TCDD	ug/l	0.00000047	0.00000039	0/5	0.00000044	0.00000047	0.00000044	0/2	0.00000049
Dioxins	55722-27-5	T	Total TCDF	ug/l	0.0000010	0.00000063	0/5	0.00000083	0.0000012	0.00000098	0/2	0.0000014
Metals	7429-90-5	D	Aluminum	mg/l	0.10	0.091	3/39	0.099	0.10	0.10	0/8	NA
Metals	7429-90-5	T	Aluminum	mg/l	1.1	0.76	38/39	0.82	0.88	0.71	8/8	0.78
Metals	7440-36-0	D	Antimony	mg/l	0.010	0.010	0/39	NA	0.010	0.010	0/8	NA
Metals	7440-36-0	T	Antimony	mg/l	0.010	0.0099	1/39	0.010	0.010	0.010	0/8	NA
Metals	7440-38-2	D	Arsenic	mg/l	0.050	0.0062	1/39	0.0084	0.050	0.011	1/8	0.022
Metals	7440-38-2	T	Arsenic	mg/l	0.0061	0.0049	7/39	0.0051	0.0050	0.0050	0/8	NA
Metals	7440-39-3	D	Barium	mg/l	0.054	0.052	39/39	0.052	0.051	0.050	8/8	0.050
Metals	7440-39-3	T	Barium	mg/l	0.065	0.061	39/39	0.062	0.061	0.059	8/8	0.060
Metals	7440-41-7	D	Beryllium	mg/l	0.0020	0.0020	0/39	NA	0.0020	0.0020	0/8	NA
Metals	7440-41-7	T	Beryllium	mg/l	0.0020	0.0020	0/39	NA	0.0020	0.0020	0/8	NA
Metals	7440-43-9	D	Cadmium	mg/l	0.0025	0.0025	0/39	NA	0.0025	0.0025	0/8	NA
Metals	7440-43-9	T	Cadmium	mg/l	0.0025	0.0025	0/39	NA	0.0025	0.0025	0/8	NA
Metals	7440-70-2	D	Calcium	mg/l	53	51	39/39	51	50	50	8/8	50
Metals	7440-70-2	T	Calcium	mg/l	54	51	39/39	52	53	51	8/8	52

Appendix II-K1
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2002.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (R2 - R6; 2002 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
Metals	7440-47-3	D	Chromium	mg/l	0.0050	0.0050	0/39	NA	0.0050	0.0050	0/8	NA
Metals	7440-47-3	T	Chromium	mg/l	0.0050	0.0050	0/39	NA	0.0050	0.0050	0/8	NA
Metals	7440-48-4	D	Cobalt	mg/l	0.0050	0.0047	3/39	0.0050	0.0050	0.0050	0/8	NA
Metals	7440-48-4	T	Cobalt	mg/l	0.010	0.0042	9/39	0.0048	0.0050	0.0045	1/8	0.0055
Metals	7440-50-8	D	Copper	mg/l	0.010	0.010	0/39	NA	0.010	0.010	0/8	NA
Metals	7440-50-8	T	Copper	mg/l	0.039	0.010	2/39	0.012	0.010	0.010	0/8	NA
Metals	7439-89-6	D	Iron	mg/l	0.087	0.039	28/39	0.044	0.032	0.028	7/8	0.030
Metals	7439-89-6	T	Iron	mg/l	1.4	1.1	39/39	1.1	1.1	0.97	8/8	1.0
Metals	7439-92-1	D	Lead	mg/l	0.0025	0.0025	0/39	NA	0.0025	0.0025	0/8	NA
Metals	7439-92-1	T	Lead	mg/l	0.0049	0.0026	5/39	0.0028	0.0025	0.0025	0/8	NA
Metals	7439-95-4	D	Magnesium	mg/l	22	20	39/39	20	20	20	8/8	NA
Metals	7439-95-4	T	Magnesium	mg/l	22	20	39/39	21	21	21	8/8	21
Metals	7439-96-5	D	Manganese	mg/l	0.0050	0.0049	1/39	0.0051	0.0050	0.0050	0/8	NA
Metals	7439-96-5	T	Manganese	mg/l	0.14	0.086	38/39	0.091	0.084	0.081	8/8	0.083
Metals	7439-97-6	D	Mercury	mg/l	0.00012	0.00010	3/39	0.00010	0.00010	0.00010	0/8	NA
Metals	7439-97-6	T	Mercury	mg/l	0.00020	0.00010	3/39	0.00011	0.00010	0.00010	0/8	NA
Metals	7440-02-0	D	Nickel	mg/l	0.020	0.020	0/39	NA	0.020	0.020	0/8	NA
Metals	7440-02-0	T	Nickel	mg/l	0.020	0.020	0/39	NA	0.020	0.020	0/8	NA
Metals	7440-09-7	D	Potassium	mg/l	3.6	3.4	39/39	3.4	3.3	3.2	8/8	3.2
Metals	7440-09-7	T	Potassium	mg/l	3.7	3.5	39/39	3.5	3.5	3.4	8/8	3.4
Metals	7782-49-2	D	Selenium	mg/l	0.0050	0.0050	0/39	NA	0.0050	0.0050	0/8	NA
Metals	7782-49-2	T	Selenium	mg/l	0.0050	0.0050	0/39	NA	0.0050	0.0050	0/8	NA
Metals	7440-22-4	D	Silver	mg/l	0.0050	0.0049	1/39	0.0051	0.0050	0.0050	0/8	NA
Metals	7440-22-4	T	Silver	mg/l	0.0050	0.0049	1/39	0.0051	0.0050	0.0050	0/8	NA
Metals	7440-23-5	D	Sodium	mg/l	24	20	39/39	21	20	18	8/8	19
Metals	7440-23-5	T	Sodium	mg/l	24	20	39/39	21	20	18	8/8	19
Metals	7440-28-0	D	Thallium	mg/l	0.0050	0.0050	0/39	NA	0.0050	0.0050	0/8	NA
Metals	7440-28-0	T	Thallium	mg/l	0.0050	0.0050	0/39	NA	0.0052	0.0050	1/8	0.0051
Metals	7440-62-2	D	Vanadium	mg/l	0.010	0.0050	3/39	0.0053	0.0050	0.0028	5/8	0.0041
Metals	7440-62-2	T	Vanadium	mg/l	0.0050	0.0049	3/39	0.0050	0.0050	0.0048	1/8	0.0052
Metals	7440-66-6	D	Zinc	mg/l	0.036	0.011	5/39	0.012	0.010	0.010	0/8	NA
Metals	7440-66-6	T	Zinc	mg/l	0.041	0.0099	15/39	0.012	0.010	0.0093	1/8	0.011

Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Appendix II-K2

Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2005

Appendix II-K2
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2005.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
VOCs	71-55-6	T	1,1,1-Trichloroethane	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	79-34-5	T	1,1,2,2-Tetrachloroethane	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	79-00-5	T	1,1,2-Trichloroethane	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	75-34-3	T	1,1-Dichloroethane	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	75-35-4	T	1,1-Dichloroethylene	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	120-82-1	T	1,2,4-Trichlorobenzene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
VOCs	95-50-1	T	1,2-Dichlorobenzene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
VOCs	107-06-2	T	1,2-Dichloroethane	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	540-59-0	T	1,2-Dichloroethene (total)	ug/l	1.0	1.0	0/10	NA	1.0	1.0	0/8	NA
VOCs	78-87-5	T	1,2-Dichloropropane	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	541-73-1	T	1,3-Dichlorobenzene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
VOCs	106-46-7	T	1,4-Dichlorobenzene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
VOCs	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
VOCs	78-93-3	T	2-Butanone (MEK)	ug/l	5.0	5.0	0/10	NA	5.0	5.0	0/8	NA
VOCs	108-10-1	T	4-Methyl-2-pentanone (MIBK)	ug/l	5.0	5.0	0/10	NA	5.0	5.0	0/8	NA
VOCs	67-64-1	T	Acetone	ug/l	13	13	0/10	NA	13	13	0/8	NA
VOCs	71-43-2	T	Benzene	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	75-27-4	T	Bromodichloromethane	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	75-25-2	T	Bromoform	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	74-83-9	T	Bromomethane	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	75-15-0	T	Carbon Disulfide	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	56-23-5	T	Carbon Tetrachloride	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	108-90-7	T	Chlorobenzene	ug/l	4.3	0.88	3/10	1.6	0.50	0.50	0/8	NA
VOCs	124-48-1	T	Chlorodibromomethane	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	75-00-3	T	Chloroethane	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	67-66-3	T	Chloroform	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	74-87-3	T	Chloromethane	ug/l	0.50	0.50	0/10	NA	0.50	0.47	1/8	0.53
VOCs	10061-01-5	T	cis-1,3-Dichloropropene	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	75-09-2	T	Dichloromethane	ug/l	2.5	2.5	0/10	NA	2.5	2.5	0/8	NA
VOCs	100-41-4	T	Ethylbenzene	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	591-78-6	T	Methyl N-Butyl Ketone	ug/l	5.0	5.0	0/10	NA	5.0	5.0	0/8	NA
VOCs	100-42-5	T	Styrene (Monomer)	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	127-18-4	T	Tetrachloroethene	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	108-88-3	T	Toluene	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	79-01-6	T	Trichloroethylene	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	75-01-4	T	Vinyl chloride	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
VOCs	1330-20-7	T	Xylenes, Total	ug/l	1.0	1.0	0/10	NA	1.0	1.0	0/8	NA

Appendix II-K2
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2005.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
SVOCs	95-95-4	T	2,4,5-Trichlorophenol	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	88-06-2	T	2,4,6-Trichlorophenol	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	120-83-2	T	2,4-Dichlorophenol	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	105-67-9	T	2,4-Dimethylphenol	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	51-28-5	T	2,4-Dinitrophenol	ug/l	24	24	0/10	24	25	25	0/8	NA
SVOCs	121-14-2	T	2,4-Dinitrotoluene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	606-20-2	T	2,6-Dinitrotoluene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	91-58-7	T	2-Chloronaphthalene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	95-57-8	T	2-Chlorophenol	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	91-57-6	T	2-Methylnaphthalene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	95-48-7	T	2-Methylphenol (o-Cresol)	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	88-74-4	T	2-Nitroaniline	ug/l	24	24	0/10	24	25	25	0/8	NA
SVOCs	88-75-5	T	2-Nitrophenol	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	91-94-1	T	3,3'-Dichlorobenzidine	ug/l	9.5	9.5	0/10	NA	10	10	0/8	NA
SVOCs	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	99-09-2	T	3-Nitroaniline	ug/l	24	24	0/10	24	25	25	0/8	NA
SVOCs	534-52-1	T	4,6-Dinitro-2-methylphenol	ug/l	24	24	0/10	24	25	25	0/8	NA
SVOCs	101-55-3	T	4-Bromophenyl Phenyl Ether	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	59-50-7	T	4-Chloro-3-methylphenol	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	7005-72-3	T	4-Chlorophenyl Phenyl Ether	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	100-02-7	T	4-Nitrophenol	ug/l	24	24	0/10	24	25	25	0/8	NA
SVOCs	83-32-9	T	Acenaphthene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	208-96-8	T	Acenaphthylene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	120-12-7	T	Anthracene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	56-55-3	T	Benzo(a)anthracene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	50-32-8	T	Benzo(a)pyrene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	205-99-2	T	Benzo(b)fluoranthene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	191-24-2	T	Benzo(g,h,i)perylene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	207-08-9	T	Benzo(k)fluoranthene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	85-68-7	T	Benzyl Butyl Phthalate	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	111-91-1	T	bis(2-Chloroethoxy)methane	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	111-44-4	T	bis(2-Chloroethyl)ether	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	117-81-7	T	bis(2-Ethylhexyl)phthalate	ug/l	4.8	4.7	0/10	4.7	14	6.1	1/8	8.3
SVOCs	86-74-8	T	Carbazole	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	218-01-9	T	Chrysene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	53-70-3	T	Dibenzo(a,h)anthracene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	132-64-9	T	Dibenzofuran	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA

Appendix II-K2
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2005.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
SVOCs	84-66-2	T	Diethyl Phthalate	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	131-11-3	T	Dimethyl Phthalate	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	84-74-2	T	Di-n-butylphthalate	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	117-84-0	T	Di-n-octylphthalate	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	206-44-0	T	Fluoranthene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	86-73-7	T	Fluorene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	118-74-1	T	Hexachlorobenzene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	87-68-3	T	Hexachlorobutadiene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	77-47-4	T	Hexachlorocyclopentadiene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	67-72-1	T	Hexachloroethane	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	193-39-5	T	Indeno(1,2,3-cd)pyrene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	78-59-1	T	Isophorone	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	91-20-3	T	Naphthalene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	98-95-3	T	Nitrobenzene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	621-64-7	T	N-Nitroso-di-n-propylamine	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	86-30-6	T	N-Nitrosodiphenylamine	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	106-47-8	T	P-Chloroaniline	ug/l	9.5	9.5	0/10	NA	10	10	0/8	NA
SVOCs	87-86-5	T	Pentachlorophenol	ug/l	0.13	0.12	0/10	0.12	0.50	0.48	1/8	0.52
SVOCs	85-01-8	T	Phenanthrene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	108-95-2	T	Phenol	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	100-01-6	T	P-Nitroaniline	ug/l	24	24	0/10	24	25	25	0/8	NA
SVOCs	129-00-0	T	Pyrene	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
SVOCs	10061-02-6	T	trans-1,3-Dichloropropene	ug/l	0.50	0.50	0/10	NA	0.50	0.50	0/8	NA
Pesticides	72-54-8	T	4,4'-DDD	ug/l	0.048	0.047	0/10	0.047	0.050	0.050	0/8	NA
Pesticides	72-55-9	T	4,4'-DDE	ug/l	0.048	0.047	0/10	0.047	0.050	0.050	0/8	NA
Pesticides	50-29-3	T	4,4'-DDT	ug/l	0.048	0.047	0/10	0.047	0.050	0.050	0/8	NA
Pesticides	309-00-2	T	Aldrin	ug/l	0.024	0.024	0/10	0.024	0.025	0.025	0/8	NA
Pesticides	319-84-6	T	alpha-BHC	ug/l	0.024	0.024	0/10	0.024	0.025	0.025	0/8	NA
Pesticides	5103-71-9	T	alpha-Chlordane	ug/l	0.024	0.024	0/10	0.024	0.025	0.025	0/8	NA
Pesticides	319-85-7	T	beta-BHC	ug/l	0.024	0.024	0/10	0.024	0.025	0.025	0/8	NA
Pesticides	319-86-8	T	delta-BHC	ug/l	0.024	0.024	0/10	0.024	0.025	0.025	0/8	NA
Pesticides	60-57-1	T	Dieldrin	ug/l	0.048	0.047	0/10	0.047	0.050	0.050	0/8	NA
Pesticides	959-98-8	T	Endosulfan I	ug/l	0.024	0.024	0/10	0.024	0.025	0.025	0/8	NA
Pesticides	33213-65-9	T	Endosulfan II	ug/l	0.048	0.047	0/10	0.047	0.050	0.050	0/8	NA
Pesticides	1031-07-8	T	Endosulfan Sulfate	ug/l	0.048	0.047	0/10	0.047	0.050	0.050	0/8	NA
Pesticides	72-20-8	T	Endrin	ug/l	0.048	0.047	0/10	0.047	0.050	0.050	0/8	NA
Pesticides	7421-93-4	T	Endrin Aldehyde	ug/l	0.048	0.047	0/10	0.047	0.050	0.050	0/8	NA

Appendix II-K2
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2005.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
Pesticides	53494-70-5	T	Endrin Ketone	ug/l	0.048	0.047	0/10	0.047	0.050	0.026	6/8	0.037
Pesticides	58-89-9	T	gamma-BHC (Lindane)	ug/l	0.024	0.024	0/10	0.024	0.025	0.025	0/8	NA
Pesticides	5103-74-2	T	gamma-Chlordane	ug/l	0.024	0.024	0/10	0.024	0.025	0.025	0/8	NA
Pesticides	76-44-8	T	Heptachlor	ug/l	0.024	0.024	0/10	0.024	0.025	0.025	0/8	NA
Pesticides	1024-57-3	T	Heptachlor Epoxide	ug/l	0.024	0.024	0/10	0.024	0.025	0.025	0/8	NA
Pesticides	72-43-5	T	Methoxychlor	ug/l	0.24	0.24	0/10	0.24	0.25	0.25	0/8	NA
Pesticides	8001-35-2	T	Toxaphene	ug/l	2.4	2.4	0/10	2.4	2.5	2.5	0/8	NA
Herbicides	93-76-5	T	2,4,5-T	ug/l	0.25	0.25	0/10	0.25	0.25	0.25	0/8	NA
Herbicides	93-72-1	T	2,4,5-TP (Silvex)	ug/l	0.25	0.25	0/10	0.25	0.25	0.25	0/8	NA
Herbicides	94-75-7	T	2,4-D	ug/l	1.2	0.41	4/10	0.64	0.25	0.25	0/8	NA
Herbicides	94-82-6	T	2,4-DB	ug/l	0.25	0.25	0/10	0.25	0.25	0.25	0/8	NA
Herbicides	75-99-0	T	Dalapon	ug/l	5.0	4.9	0/10	4.9	60	60	0/8	NA
Herbicides	1918-00-9	T	Dicamba	ug/l	0.25	0.25	0/10	0.25	0.60	0.60	0/8	NA
Herbicides	120-36-5	T	Dichlorprop	ug/l	0.25	0.23	1/10	0.26	3.0	3.0	0/8	NA
Herbicides	88-85-7	T	Dinoseb	ug/l	4.8	4.7	0/10	4.7	5.0	5.0	0/8	NA
Herbicides	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	ug/l	60	60	0/10	NA	60	60	0/8	NA
Herbicides	93-65-2	T	MCPP	ug/l	60	60	0/10	NA	60	60	0/8	NA
Metals	7429-90-5	D	Aluminum	mg/l	0.10	0.10	0/10	0.10	0.10	0.10	0/8	NA
Metals	7429-90-5	T	Aluminum	mg/l	3.8	2.6	10/10	3.2	0.88	0.71	8/8	0.78
Metals	7440-36-0	D	Antimony	mg/l	0.010	0.010	0/10	0.010	0.010	0.010	0/8	NA
Metals	7440-36-0	T	Antimony	mg/l	0.010	0.010	0/10	0.010	0.010	0.010	0/8	NA
Metals	7440-38-2	D	Arsenic	mg/l	0.0077	0.0054	4/10	0.0060	0.050	0.011	1/8	0.022
Metals	7440-38-2	T	Arsenic	mg/l	0.0066	0.0054	5/10	0.0059	0.0050	0.0050	0/8	NA
Metals	7440-39-3	D	Barium	mg/l	0.076	0.072	10/10	0.075	0.051	0.050	8/8	0.050
Metals	7440-39-3	T	Barium	mg/l	0.12	0.10	10/10	0.11	0.061	0.059	8/8	0.060
Metals	7440-41-7	D	Beryllium	mg/l	0.0020	0.0020	0/10	NA	0.0020	0.0020	0/8	NA
Metals	7440-41-7	T	Beryllium	mg/l	0.0020	0.00089	6/10	0.0015	0.0020	0.0020	0/8	NA
Metals	7440-43-9	D	Cadmium	mg/l	0.0025	0.0025	0/10	0.0025	0.0025	0.0025	0/8	NA
Metals	7440-43-9	T	Cadmium	mg/l	0.0025	0.0025	0/10	0.0025	0.0025	0.0025	0/8	NA
Metals	7440-70-2	D	Calcium	mg/l	45	43	10/10	44	50	50	8/8	50
Metals	7440-70-2	T	Calcium	mg/l	46	45	10/10	46	53	51	8/8	52
Metals	7440-47-3	D	Chromium	mg/l	0.0050	0.0046	1/10	0.0054	0.0050	0.0050	0/8	NA
Metals	7440-47-3	T	Chromium	mg/l	0.0047	0.0034	10/10	0.0039	0.0050	0.0050	0/8	NA
Metals	7440-48-4	D	Cobalt	mg/l	0.0050	0.0050	0/10	0.0050	0.0050	0.0050	0/8	NA
Metals	7440-48-4	T	Cobalt	mg/l	0.0050	0.0016	9/10	0.0024	0.0050	0.0045	1/8	0.0055
Metals	7440-50-8	D	Copper	mg/l	0.010	0.010	0/10	0.010	0.010	0.010	0/8	NA
Metals	7440-50-8	T	Copper	mg/l	0.0050	0.0035	10/10	0.0040	0.010	0.010	0/8	NA
Metals	7439-89-6	D	Iron	mg/l	0.025	0.025	0/10	0.025	0.032	0.028	7/8	0.030

Appendix II-K2
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2005.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (PDA9A - R3; 2005 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
Metals	7439-89-6	T	Iron	mg/l	3.5	2.5	10/10	3.1	1.1	0.97	8/8	1.0
Metals	7439-92-1	D	Lead	mg/l	0.0027	0.0025	3/10	0.0026	0.0025	0.0025	0/8	NA
Metals	7439-92-1	T	Lead	mg/l	0.0047	0.0035	8/10	0.0041	0.0025	0.0025	0/8	NA
Metals	7439-95-4	D	Magnesium	mg/l	22	21	10/10	21	20	20	8/8	NA
Metals	7439-95-4	T	Magnesium	mg/l	22	21	10/10	22	21	21	8/8	21
Metals	7439-96-5	D	Manganese	mg/l	0.0050	0.0050	0/10	0.0050	0.0050	0.0050	0/8	NA
Metals	7439-96-5	T	Manganese	mg/l	0.25	0.20	10/10	0.23	0.084	0.081	8/8	0.083
Metals	7439-97-6	D	Mercury	mg/l	0.00010	0.00010	0/10	NA	0.00010	0.00010	0/8	NA
Metals	7439-97-6	T	Mercury	mg/l	0.00010	0.000099	1/10	0.00010	0.00010	0.00010	0/8	NA
Metals	7440-02-0	D	Nickel	mg/l	0.020	0.0077	7/10	0.013	0.020	0.020	0/8	NA
Metals	7440-02-0	T	Nickel	mg/l	0.0065	0.0050	10/10	0.0059	0.020	0.020	0/8	NA
Metals	7440-09-7	D	Potassium	mg/l	4.9	4.6	10/10	4.8	3.3	3.2	8/8	3.2
Metals	7440-09-7	T	Potassium	mg/l	5.5	5.2	10/10	5.5	3.5	3.4	8/8	3.4
Metals	7782-49-2	D	Selenium	mg/l	0.0075	0.0045	1/10	0.0053	0.0050	0.0050	0/8	NA
Metals	7782-49-2	T	Selenium	mg/l	0.0060	0.0047	0/10	0.0052	0.0050	0.0050	0/8	NA
Metals	7440-22-4	D	Silver	mg/l	0.0050	0.0050	0/10	0.0050	0.0050	0.0050	0/8	NA
Metals	7440-22-4	T	Silver	mg/l	0.0050	0.0050	0/10	0.0050	0.0050	0.0050	0/8	NA
Metals	7440-23-5	D	Sodium	mg/l	34	31	10/10	33	20	18	8/8	19
Metals	7440-23-5	T	Sodium	mg/l	35	31	10/10	33	20	18	8/8	19
Metals	7440-28-0	D	Thallium	mg/l	0.013	0.013	0/10	0.013	0.0050	0.0050	0/8	NA
Metals	7440-28-0	T	Thallium	mg/l	0.013	0.012	1/10	0.013	0.0052	0.0050	1/8	0.0051
Metals	7440-62-2	D	Vanadium	mg/l	0.0043	0.0033	10/10	0.0036	0.0050	0.0028	5/8	0.0041
Metals	7440-62-2	T	Vanadium	mg/l	0.011	0.0088	10/10	0.010	0.0050	0.0048	1/8	0.0052
Metals	7440-66-6	D	Zinc	mg/l	0.010	0.0063	7/10	0.0080	0.010	0.010	0/8	NA
Metals	7440-66-6	T	Zinc	mg/l	0.065	0.026	10/10	0.037	0.010	0.0093	1/8	0.011

Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Appendix II-K3

Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2007

Appendix II-K3
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2007.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
VOCs	71-55-6	T	1,1,1-Trichloroethane	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	79-34-5	T	1,1,2,2-Tetrachloroethane	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	79-00-5	T	1,1,2-Trichloroethane	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	75-34-3	T	1,1-Dichloroethane	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	75-35-4	T	1,1-Dichloroethylene	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	120-82-1	T	1,2,4-Trichlorobenzene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
VOCs	95-50-1	T	1,2-Dichlorobenzene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
VOCs	107-06-2	T	1,2-Dichloroethane	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	540-59-0	T	1,2-Dichloroethene (total)	ug/l	1.0	1.0	0/5	NA	1.0	1.0	0/8	NA
VOCs	78-87-5	T	1,2-Dichloropropane	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	541-73-1	T	1,3-Dichlorobenzene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
VOCs	106-46-7	T	1,4-Dichlorobenzene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
VOCs	108-60-1	T	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
VOCs	78-93-3	T	2-Butanone (MEK)	ug/l	5.0	5.0	0/5	NA	5.0	5.0	0/8	NA
VOCs	108-10-1	T	4-Methyl-2-pentanone (MIBK)	ug/l	5.0	5.0	0/5	NA	5.0	5.0	0/8	NA
VOCs	67-64-1	T	Acetone	ug/l	13	13	0/5	NA	13	13	0/8	NA
VOCs	71-43-2	T	Benzene	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	75-27-4	T	Bromodichloromethane	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	75-25-2	T	Bromoform	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	74-83-9	T	Bromomethane	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	75-15-0	T	Carbon Disulfide	ug/l	1.0	1.0	0/5	NA	0.50	0.50	0/8	NA
VOCs	56-23-5	T	Carbon Tetrachloride	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	108-90-7	T	Chlorobenzene	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	124-48-1	T	Chlorodibromomethane	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	75-00-3	T	Chloroethane	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	67-66-3	T	Chloroform	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	74-87-3	T	Chloromethane	ug/l	0.50	0.50	0/5	NA	0.50	0.47	1/8	0.53
VOCs	10061-01-5	T	cis-1,3-Dichloropropene	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	75-09-2	T	Dichloromethane	ug/l	2.5	2.5	0/5	NA	2.5	2.5	0/8	NA
VOCs	100-41-4	T	Ethylbenzene	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	591-78-6	T	Methyl N-Butyl Ketone	ug/l	5.0	5.0	0/5	NA	5.0	5.0	0/8	NA
VOCs	100-42-5	T	Styrene (Monomer)	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	127-18-4	T	Tetrachloroethene	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	108-88-3	T	Toluene	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	79-01-6	T	Trichloroethylene	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	75-01-4	T	Vinyl chloride	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
VOCs	1330-20-7	T	Xylenes, Total	ug/l	1.0	1.0	0/5	NA	1.0	1.0	0/8	NA

Appendix II-K3
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2007.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
SVOCs	95-95-4	T	2,4,5-Trichlorophenol	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	88-06-2	T	2,4,6-Trichlorophenol	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	120-83-2	T	2,4-Dichlorophenol	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	105-67-9	T	2,4-Dimethylphenol	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	51-28-5	T	2,4-Dinitrophenol	ug/l	25	24	0/5	25	25	25	0/8	NA
SVOCs	121-14-2	T	2,4-Dinitrotoluene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	606-20-2	T	2,6-Dinitrotoluene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	91-58-7	T	2-Chloronaphthalene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	95-57-8	T	2-Chlorophenol	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	91-57-6	T	2-Methylnaphthalene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	95-48-7	T	2-Methylphenol (o-Cresol)	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	88-74-4	T	2-Nitroaniline	ug/l	25	24	0/5	25	25	25	0/8	NA
SVOCs	88-75-5	T	2-Nitrophenol	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	91-94-1	T	3,3'-Dichlorobenzidine	ug/l	10	9.6	0/5	9.8	10	10	0/8	NA
SVOCs	106-44-5	T	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	99-09-2	T	3-Nitroaniline	ug/l	25	24	0/5	25	25	25	0/8	NA
SVOCs	534-52-1	T	4,6-Dinitro-2-methylphenol	ug/l	25	24	0/5	25	25	25	0/8	NA
SVOCs	101-55-3	T	4-Bromophenyl Phenyl Ether	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	59-50-7	T	4-Chloro-3-methylphenol	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	7005-72-3	T	4-Chlorophenyl Phenyl Ether	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	100-02-7	T	4-Nitrophenol	ug/l	25	24	0/5	25	25	25	0/8	NA
SVOCs	83-32-9	T	Acenaphthene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	208-96-8	T	Acenaphthylene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	120-12-7	T	Anthracene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	56-55-3	T	Benzo(a)anthracene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	50-32-8	T	Benzo(a)pyrene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	205-99-2	T	Benzo(b)fluoranthene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	191-24-2	T	Benzo(g,h,i)perylene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	207-08-9	T	Benzo(k)fluoranthene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	85-68-7	T	Benzyl Butyl Phthalate	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	111-91-1	T	bis(2-Chloroethoxy)methane	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	111-44-4	T	bis(2-Chloroethyl)ether	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	117-81-7	T	bis(2-Ethylhexyl)phthalate	ug/l	4.9	4.8	0/5	4.9	14	6.1	1/8	8.3
SVOCs	86-74-8	T	Carbazole	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	218-01-9	T	Chrysene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	53-70-3	T	Dibenzo(a,h)anthracene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	132-64-9	T	Dibenzofuran	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	84-66-2	T	Diethyl Phthalate	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	131-11-3	T	Dimethyl Phthalate	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA

Appendix II-K3
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2007.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
SVOCs	84-74-2	T	Di-n-butylphthalate	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	117-84-0	T	Di-n-octylphthalate	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	206-44-0	T	Fluoranthene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	86-73-7	T	Fluorene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	118-74-1	T	Hexachlorobenzene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	87-68-3	T	Hexachlorobutadiene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	77-47-4	T	Hexachlorocyclopentadiene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	67-72-1	T	Hexachloroethane	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	193-39-5	T	Indeno(1,2,3-cd)pyrene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	78-59-1	T	Isophorone	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	91-20-3	T	Naphthalene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	98-95-3	T	Nitrobenzene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	621-64-7	T	N-Nitroso-di-n-propylamine	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	86-30-6	T	N-Nitrosodiphenylamine	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	106-47-8	T	P-Chloroaniline	ug/l	10	9.6	0/5	9.8	10	10	0/8	NA
SVOCs	87-86-5	T	Pentachlorophenol	ug/l	0.13	0.12	0/5	0.13	0.50	0.48	1/8	0.52
SVOCs	85-01-8	T	Phenanthrene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	108-95-2	T	Phenol	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	100-01-6	T	P-Nitroaniline	ug/l	25	24	0/5	25	25	25	0/8	NA
SVOCs	129-00-0	T	Pyrene	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
SVOCs	10061-02-6	T	trans-1,3-Dichloropropene	ug/l	0.50	0.50	0/5	NA	0.50	0.50	0/8	NA
Pesticides	72-54-8	T	4,4'-DDD	ug/l	0.049	0.049	0/5	0.049	0.050	0.050	0/8	NA
Pesticides	72-55-9	T	4,4'-DDE	ug/l	0.049	0.049	0/5	0.049	0.050	0.050	0/8	NA
Pesticides	50-29-3	T	4,4'-DDT	ug/l	0.049	0.049	0/5	0.049	0.050	0.050	0/8	NA
Pesticides	309-00-2	T	Aldrin	ug/l	0.025	0.024	0/5	0.025	0.025	0.025	0/8	NA
Pesticides	319-84-6	T	alpha-BHC	ug/l	0.025	0.024	0/5	0.025	0.025	0.025	0/8	NA
Pesticides	5103-71-9	T	alpha-Chlordane	ug/l	0.025	0.024	0/5	0.025	0.025	0.025	0/8	NA
Pesticides	319-85-7	T	beta-BHC	ug/l	0.025	0.024	0/5	0.025	0.025	0.025	0/8	NA
Pesticides	319-86-8	T	delta-BHC	ug/l	0.025	0.024	0/5	0.025	0.025	0.025	0/8	NA
Pesticides	60-57-1	T	Dieldrin	ug/l	0.049	0.049	0/5	0.049	0.050	0.050	0/8	NA
Pesticides	959-98-8	T	Endosulfan I	ug/l	0.025	0.024	0/5	0.025	0.025	0.025	0/8	NA
Pesticides	33213-65-9	T	Endosulfan II	ug/l	0.049	0.049	0/5	0.049	0.050	0.050	0/8	NA
Pesticides	1031-07-8	T	Endosulfan Sulfate	ug/l	0.049	0.049	0/5	0.049	0.050	0.050	0/8	NA
Pesticides	72-20-8	T	Endrin	ug/l	0.049	0.049	0/5	0.049	0.050	0.050	0/8	NA
Pesticides	7421-93-4	T	Endrin Aldehyde	ug/l	0.049	0.049	0/5	0.049	0.050	0.050	0/8	NA
Pesticides	53494-70-5	T	Endrin Ketone	ug/l	0.049	0.049	0/5	0.049	0.050	0.026	6/8	0.037
Pesticides	58-89-9	T	gamma-BHC (Lindane)	ug/l	0.025	0.024	0/5	0.025	0.025	0.025	0/8	NA
Pesticides	5103-74-2	T	gamma-Chlordane	ug/l	0.025	0.024	0/5	0.025	0.025	0.025	0/8	NA

Appendix II-K3
Calculation of 95% Upper Confidence Limit (UCL) Mean Concentrations for COPECs Identified in Surface Water in 2007.

ChemClass	CAS	Total or Dissolved	Analyte	Units	Sites (GMCS-9 - GMCS-2; 2007 data)				Reference (R1; 2002 data)			
					Max	Avg	Freq	H-95UCL	Max	Avg	Freq	H-95UCL
Pesticides	76-44-8	T	Heptachlor	ug/l	0.025	0.024	0/5	0.025	0.025	0.025	0/8	NA
Pesticides	1024-57-3	T	Heptachlor Epoxide	ug/l	0.025	0.024	0/5	0.025	0.025	0.025	0/8	NA
Pesticides	72-43-5	T	Methoxychlor	ug/l	0.25	0.24	0/5	0.25	0.25	0.25	0/8	NA
Pesticides	8001-35-2	T	Toxaphene	ug/l	2.5	2.4	0/5	2.5	2.5	2.5	0/8	NA
Herbicides	93-76-5	T	2,4,5-T	ug/l	0.25	0.25	0/5	0.25	0.25	0.25	0/8	NA
Herbicides	93-72-1	T	2,4,5-TP (Silvex)	ug/l	0.25	0.25	0/5	0.25	0.25	0.25	0/8	NA
Herbicides	94-75-7	T	2,4-D	ug/l	0.25	0.25	0/5	0.25	0.25	0.25	0/8	NA
Herbicides	94-82-6	T	2,4-DB	ug/l	0.25	0.25	0/5	0.25	0.25	0.25	0/8	NA
Herbicides	75-99-0	T	Dalapon	ug/l	5.0	4.9	0/5	5.0	60	60	0/8	NA
Herbicides	1918-00-9	T	Dicamba	ug/l	0.25	0.25	0/5	0.25	0.60	0.60	0/8	NA
Herbicides	120-36-5	T	Dichlorprop	ug/l	0.16	0.12	5/5	0.14	3.0	3.0	0/8	NA
Herbicides	88-85-7	T	Dinoseb	ug/l	4.9	4.8	0/5	4.9	5.0	5.0	0/8	NA
Herbicides	94-74-6	T	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	ug/l	60	60	0/5	NA	60	60	0/8	NA
Herbicides	93-65-2	T	MCPP	ug/l	60	60	0/5	NA	60	60	0/8	NA
Metals	7429-90-5	D	Aluminum	mg/l	0.10	0.086	1/5	0.11	0.10	0.10	0/8	NA
Metals	7440-36-0	D	Antimony	mg/l	0.010	0.010	0/5	NA	0.010	0.010	0/8	NA
Metals	7440-38-2	D	Arsenic	mg/l	0.0050	0.0050	0/5	NA	0.050	0.011	1/8	0.022
Metals	7440-39-3	D	Barium	mg/l	0.066	0.065	5/5	0.066	0.051	0.050	8/8	0.050
Metals	7440-41-7	D	Beryllium	mg/l	0.0020	0.0020	0/5	NA	0.0020	0.0020	0/8	NA
Metals	7440-43-9	D	Cadmium	mg/l	0.0025	0.0025	0/5	NA	0.0025	0.0025	0/8	NA
Metals	7440-70-2	D	Calcium	mg/l	59	58	5/5	59	50	50	8/8	50
Metals	7440-47-3	D	Chromium	mg/l	0.0050	0.0050	0/5	NA	0.0050	0.0050	0/8	NA
Metals	7440-48-4	D	Cobalt	mg/l	0.0050	0.0050	0/5	NA	0.0050	0.0050	0/8	NA
Metals	7440-50-8	D	Copper	mg/l	0.0020	0.0019	0/5	0.0019	0.010	0.010	0/8	NA
Metals	7439-89-6	D	Iron	mg/l	0.092	0.045	5/5	0.068	0.032	0.028	7/8	0.030
Metals	7439-92-1	D	Lead	mg/l	0.0025	0.0025	0/5	NA	0.0025	0.0025	0/8	NA
Metals	7439-95-4	D	Magnesium	mg/l	21	21	5/5	NA	20	20	8/8	NA
Metals	7439-96-5	D	Manganese	mg/l	0.0050	0.0050	0/5	NA	0.0050	0.0050	0/8	NA
Metals	7439-97-6	D	Mercury	mg/l	0.00010	0.00010	0/5	NA	0.00010	0.00010	0/8	NA
Metals	7440-02-0	D	Nickel	mg/l	0.020	0.013	2/5	0.021	0.020	0.020	0/8	NA
Metals	7440-09-7	D	Potassium	mg/l	4.6	4.5	5/5	4.6	3.3	3.2	8/8	3.2
Metals	7782-49-2	D	Selenium	mg/l	0.0050	0.0050	0/5	NA	0.0050	0.0050	0/8	NA
Metals	7440-22-4	D	Silver	mg/l	0.0050	0.0050	0/5	NA	0.0050	0.0050	0/8	NA
Metals	7440-23-5	D	Sodium	mg/l	34	33	5/5	34	20	18	8/8	19
Metals	7440-28-0	D	Thallium	mg/l	0.013	0.013	0/5	0.013	0.0050	0.0050	0/8	NA
Metals	7440-62-2	D	Vanadium	mg/l	0.0026	0.0023	5/5	0.0025	0.0050	0.0028	5/8	0.0041
Metals	7440-66-6	D	Zinc	mg/l	0.0034	0.0030	0/5	0.0033	0.010	0.010	0/8	NA

Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Appendix II-L

COPECs Identified in Clam Tissue (Bioaccumulation Testing) by Sampling Location

Appendix II-L
Concentrations of COPECs Identified in Clam Tissue (Bioaccumulation Testing) by Sampling Location

	SVOCs				Pesticides		Herbicides						PCBs	Dioxins				Metals														
Sample ID	bis(2-Ethylhexyl)phthalate	Di-n-butylphthalate	Indeno(1,2,3-cd)pyrene	Pentachlorophenol	4,4'-DDE	4,4'-DDT	2,4,5-T	2,4-D	2,4-DB	Dichlorprop	MCPA	MCPP	Trichlorobiphenyl	OCDD	Total HpCDD	Total TCDD	Total TCDF	Aluminum	Arsenic	Barium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Vanadium	Zinc
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
CONT.#1					3.5 J												0.63	32 J	2	81		3.7	0.37	4.1	360 J		48	84	0.0047 J	0.94	75	2900 J		2.7 J
CONT.#2					6.4 J				4.9 J									45	2.2	56		2.9	0.37	5.2	280		63	65	0.0093	0.45	110	2100		4.1
CONT.#3					5.6 J													61 J	1.5	88		5	0.64	6.2	280 J		110	480		1.1	150	1500 J	1.2	6.8 J
R1AD1S		150 J			9.7 J							1400 J		11				83	1.4	89		4.1	0.51	7.3	480 J		120	330		0.96	150 J	1600	1	10
R1AM1S					8.9 J			11 J		3.7 J	3100	1600 J						60		110			0.38	5.2	190 J		68	290		0.52	84 J	2200		4.5
R1AU1S		120 J			6.3 J		11 J											51	0.94	130		1.4	0.75	3.7	230		66	500	0.0046	0.8	84	2100	0.82	4.2
R1BD1S					14 J	2.4 J		21				2000 J						35	1.1	120		4.5	0.47	6.6	230 J		82	420		0.98	120 J	2000		5.7
R1BM1S					12			8.6 J				4500						20 J	0.78	130			0.35	3.6	170 J		54	360		0.35	75 J	2300		2.3
R1BM2S					9.1 J				3.9 J	4.2 J								40	1.2	92		5	0.47	4.2	220		65	310	0.005	0.64	110	1700		4.2
R1BU1S					9.2 J			12 J	5.4 J			2900 J	49					62	2.2	130			1	8	840		100	840	0.0099	0.96	140	1600	1.6	7.6
R1CM1S					9.6 J		3.5 J	14 J		4.9 J								37	0.83	110		1.6	0.5	4.2	220		61	350	0.0054	1.1	90	2000	0.69	4.2
R2AD1S					7.8 J									6.7 J				47	3.6	90		1.9	0.28	5.2	540 J		60	56	0.0041	0.28	110 J	2500		3.8
R2AM1S					9.7 J			14				2200						70	3.7	200		1.3	0.94	4.7	800 J		80	890		0.75	79 J	2400	1.5	2.9
R2AM2S					10					17 J		2400 J						44	2	110		2	0.63	3.9	430	0.35	63	420	0.0069	0.64	91	2000	0.77	5.6
R2AU1S					8.8 J					12 J		1700 J						49	2.5	130		4.1	0.89	4.4	480		74	800	0.0042	0.7	97	1700	1.1	7.6
R2BD1S					10			22				1600 J						44	1.3	150		1.7	0.42	4	290 J		62	480		0.69	66 J	2300		2.3
R2BM1S					9.7 J							3200						60	0.75	110		1.8	0.63	6.8	230 J		77	550		0.97	94 J	2100	1.2	4.4
R2BU1S					6.8 J							1600 J						30	1.2	110		3.9	0.49	5.5	220 J		75	390		1	130 J	1900		4.8
R2CM1S					7.1 J							7800						70	2.2	190		3.2	1.4	4.9	490 J		84	1300		2	120 J	2200	1.7	4.1
R3AD1S	260 J											580 J						13 J	1.1	81		4.8	0.14	4.1	160 J		47	40	0.0044	0.38	120 J	2400	0.25	3.4
R3AM1S					3.1 J												2	20 J	1.4	95		5.8		4.6	270 J		42	27	0.0049 J	1.7	79	2700 J		3.1 J
R3AU1S					4.7 J					4.2 J				5.7 J				69 J	4.4	190		1.9	0.99	2.9	960 J		64	880	0.004 J	0.73	70	2600 J	1.4	2.5 J
R3BD1S					5 J									11		0.5		11 J	1.3	54		2.2	0.18	4.7	160 J	0.36	54	33	0.0093 J	0.25	150	1800 J		5 J
R3BM1S					5 J					3.1 J				6.1 J				17 J	0.96	61		3.2		3.8	170 J		42	30	0.0054	0.23	100 J	2600		2.9
R3BU1S	320 J				9.6 J			15		35 J		3700 J						60	2.3	150		2.6	0.83	4.7	600 J		74	660		0.88	87 J	2500	1.1	3.8
R3CM1S					7.1 J					4.7 J								34 J	1.4	150		1.5	0.63	4.3	240 J		63	510		0.69	97	2400 J		3.4 J
R4AD1S					4 J			9.4 J	4.3 J					45	2.8	1		32	2.3	77	0.064 J	10	0.55	6	410		63	110	0.0091	2	140	2100		8.1
R4AM1S					5.4 J													42	3.3	39	0.14	57	0.85	11	710	1.1	89	120	0.013	25	190	1100	0.86	13
R4AU1S					6.4 J				7.8 J					5.7 J				21	1.7	54		4.1	0.26	5.2	260	0.5	58	37	0.0065	0.28	130	2200		5.4
R4BD1S										3.3 J	480 J	1100 J						5.4 J	1.1	55		6.1	0.17	4.3	140 J		48	52			120 J	2500	0.22	3.6
R4BM1S												1200 J						20 J	2.3	76			0.29	4.6	650 J		50	94		0.33	110 J	2500	0.44	4.1
R4BU1S					2.4 J													24 J	1.7	74		4	0.26	4.7	290 J	0.33	47	61	0.0073 J	0.61	79	2800 J		2.9 J
R4CM1S					4 J					3 J								22	2.1	55	0.059	8.4	0.41	5.4	320		50	66	0.0094	0.69	100	2200		5.3
R4CM2S					4.1 J					6 J								22	1.7	71		7.9	0.38	4.9	280		50	73	0.0088	1.7	120	2300		4.1

Appendix II-L
Concentrations of COPECs Identified in Clam Tissue (Bioaccumulation Testing) by Sampling Location

Sample ID	SVOCs				Pesticides		Herbicides						PCBs	Dioxins				Metals														
	bis(2-Ethylhexyl)phthalate	Di-n-butylphthalate	Indeno(1,2,3-cd)pyrene	Pentachlorophenol	4,4'-DDE	4,4'-DDT	2,4,5-T	2,4-D	2,4-DB	Dichlorprop	MCPA	MCPP	Trichlorobiphenyl	OCDD	Total HpCDD	Total TCDD	Total TCDF	Aluminum	Arsenic	Barium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Vanadium	Zinc
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
R5AM1S					4.2 J													30 J	1.7	63		7.2	0.34	5.8	270 J		56	77	0.0058 J	1.1	140	2200 J		4.6 J
R5AN1S					5.5 J			7.2 J				600 J						46	2.3	110		9.6	0.88	6	480		86	660	0.0048	1.1	140	1700	1.2	7.2
R5AU1S					4.6 J													20 J	1.5	86		1.2		3.5	240 J		38	48	0.013 J	0.27	99	2600 J		3.2 J
R5BM1S					3.2 J													18	1.6	80		13	0.44	4.6	280		47	76	0.0053	5.2	110	2400		4
R5BN1S					19	3.5 J	4.6 J			4.1 J								35	1.9	120			0.66	5	630	0.49	69	500	0.0072	0.72	110	1800	0.98	5.2
R5BU1S					3.8 J						440 J							23	2	70		3.5	0.42	6	330	0.37	53	81	0.0063	0.5	120	2200		4.6
R5CM1S			71 J	160 J	4.5 J			8.6 J	7.2 J									19	1.6	62		5	0.33	4.3	230		50	80	0.0092	0.4	120	2200		4.2
R6AD1S					3 J					6.3 J								22	1.6	72		2.5	0.32	3.9	290	0.35	45	65	0.0052	0.3	110	2500		3.6
R6AM1S	230 J				5.6 J					4.9 J				5.8 J				18 J	1.3	73		1.1	0.23	3.8	180 J		50	34	0.0059		120 J	2400	0.23	3.1
R6AM2S					6 J				8.8 J	4.1 J				8.6 J				33	1	96		11		4.9	260		51	32	0.011	4.8	85	2500		4.9
R6AU1S										6.2 J	480 J							13 J	1.4	72		1.1		3.7	200 J		42	52	0.0065	0.31	100 J	3000		2.7
R6BM1S					3.1 J													21 J	1.1	84		2.8		4.8	180 J		50	29	0.0066 J	0.35	71	2700 J		2.7 J
R6BU1S					5.8 J						430 J							15 J	0.82	79		3.1	0.15	3	190 J		33	45	0.0051	0.84	52 J	3200	0.25	1.7
R6CM1S											420 J							17 J	1.8	62		4.1	0.32	5.6	240 J		69	71		0.48	160 J	2000	0.35	6

REVISED BASELINE
ECOLOGICAL RISK ASSESSMENT

SAUGET AREA 2 SITES
(SITES O, P, Q, R, S)
SAUGET, ILLINOIS

VOLUME III

FLOODPLAIN ASSESSMENT TABLES
FLOODPLAIN ASSESSMENT FIGURES
FLOODPLAIN ASSESSMENT APPENDICES

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SAUGET AREA 2 VEGETATIVE SPECIES LIST	
Common Name	***Scientific Name***
Trees	
Ash, Wafer	*Ptelea trifoliata*
Ash, White	*Fraxinus americana*
Boxelder	*Acer negundo*
Cottonwood, Eastern	*Populus deltoides*
Elm, American	*Ulmus americana*
Elm, Slippery	*Ulmus rubra*
Locust, Black	*Robinia pseudoacacia*
Maple, Silver	*Acer saccharinum*
Mulberry, White	*Morus alba*
Sumac, Smooth	*Rhus glabra*
Walnut, Black	*Juglans nigra*
Willow, Black	*Salix nigra*
Shrubs and Vines	
Creeper, Trumpet	*Campsis radicans*
Cucumber, Wild	*Echinocystis lobata*
Dogwood, Stiff	*Cornus foemina*
Dogwood, Silky	*Cornus amomum*
Grape	*Vitis sp.*
Honeysuckle, Tartarian	*Lonicera tartarica*
Ivy, Poison	*Toxicodendron radicans*
Wildflowers	
Artichoke, Jerusalem	*Helianthus tuberosus*
Aster, White Heath	*Aster pilosus*
Beardtongue, White	*Penstemon digitalis*
Bush Clover, Slender	*Lespedeza virginica*
Camphorweed	*Heterotheca subaxillaris*
Cleavers	*Galium aparine*
Clotbur, Common	*Xanthium chinense*
Dodder, Common	*Cuscuta gronovii*
Evening Primrose, Common	*Oenothera biennis*
Fog Fruit, Northern	*Phyla lanceolate*
Goldenrod, Canada	*Solidago canadensis*
Goldenrod, Late (Giant)	*Solidago gigantean*
Goldenrod, Tall	*Solidago altissima*
Hawkweed	*Hieracium gronovii*
Wildflowers (cont.)	
Horseweed	*Erigeron canadensis*
Jimsonweed	*Datura stramonium*
Knotweed (Jumpseed), Virginia	*Polygonum virginianum*

SAUGET AREA 2 VEGETATIVE SPECIES LIST	
Common Name	***Scientific Name***
Lady's Thumb	*Polygonum persicaria*
Milkweed, Common	*Asclepias syriaca*
Morning Glory, Ivy-Leaved	*Ipomoea hederacea*
Morning Glory, Small Red	*Ipomoea coccinea*
Morning Glory, Small White	*Ipomoea lacunose*
Mullein, Common	*Verbascum thapsus*
Nettle, Tall	*Urtica procera*
Pea, Partridge	*Cassia fasciculata*
Pokeweed, Common	*Phytolacca americana*
Ragweed, Common	*Ambrosia artemisiifolia*
Ragweed, Giant	*Ambrosia trifida*
Snakeroot, White	*Eupatorium rugosum*
Sneezeweed	*Helenium autumnale*
Sunflower, Tickseed	*Bidens aristosa*
Thoroughwort, Tall	*Eupatorium altissimum*
Tick Trefoil, Panicled	*Desmodium paniculatum*
Vetch, Crown	*Coronilla varia*
Water Pepper	*Polygonum hydropiper*
Grasses, Sedges, Rushes	
Brome, Smooth	*Bromus inermis*
Bluestem, Bushy	*Andropogon gerardi*
Dropseed, Tall	*Sporobolus heterolepis*
Fowl Meadowgrass	*Glyceria striata*
Foxtail, Meadow	*Alopecurus pratensis*
Grass, Barnyard	*Echinochloa crusgalli*
Grass, Indian	*Sorghastrum nutans*
Grass, Johnson	*Sorghum halepense*
Grass, Manna	*Glyceria obtuse*
Grass, Orchard	*Dactylis glomerata*
Sedge, Box	*Carex lurida*
Sedge, Umbrella	*Cyperus strigosus*

Table 7-16
Piscivorous COPECs for the Adjacent River Areas in 2002
Sauget, IL

Mink Modeling HQs	Osprey Modeling HQs
Nitrobenzene (NOAEL only)	Mercury (NOAEL only)
MCPP (NOAEL only)	
PCBs (NOAEL only)	
Dioxins/furans (NOAEL only)	
Aluminum (NOAEL only)	
Arsenic (NOAEL only)	

NOTES:
Analytes listed are only for those exceeding their benchmark/TRV, based on detected values, and were above the background values.
Shaded entries are for those compounds that are COPECs for all receptors and all concentrations.

Table 7-17
Piscivorous COPECs for the Downstream River Areas in 2002
Sauget, IL

Mink Modeling HQs	Osprey Modeling HQs
PCBs (NOAEL only)	None
Dioxins/furans (NOAEL only)	
Aluminum (NOAEL only)	
Antimony (NOAEL only)	
Arsenic (NOAEL only)	

NOTES:
Analytes listed are only for those exceeding their benchmark/TRV, based on detected values, and were above the background values.
Shaded entries are for those compounds that are COPECs for all receptors and all concentrations.

Table 7-18
Piscivorous COPECs for the Adjacent River Areas in 2007
Sauget, IL

Mink Modeling HQs	Osprey Modeling HQs
MCPP (NOAEL only) PCBs (NOAEL only) Dioxins/furans (NOAEL only) Arsenic (NOAEL only)	None

NOTES:
Analytes listed are only for those exceeding their benchmark/TRV, based on detected values, and were above the background values.
Shaded entries are for those compounds that are COPECs for all receptors and all concentrations.

Table 7-19
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Upstream River 2002
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Pond Fish (mg/kg)	Area Use Factor (a)	Dietary Percentage of Pond Fish (b)	Dose from Pond Fish (mg/kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Dietary Percentage of River Fish (b)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Surface Water (b)	Dose from Pond Surface Water (mg/kg/day)
SVOCs													
1,2,4-Trichlorobenzene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
1,2-Dichlorobenzene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
1,3-Dichlorobenzene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
1,4-Dichlorobenzene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
2,2'-Oxybis(1-Chloropropane)	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
2,4,5-Trichlorophenol	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
2,4,6-Trichlorophenol	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
2,4-Dichlorophenol	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
2,4-Dimethylphenol	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
2,4-Dinitrophenol	0.14	***2.6E+00***	1.0	0.0	0.0E+00	***1.3E+00***	1.0	3.1E-01	0.10	***2.5E-02***	1.0	0.0	0.0E+00
2,4-Dinitrotoluene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
2,6-Dinitrotoluene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
2-Chloronaphthalene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
2-Chlorophenol	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
2-Methylnaphthalene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
2-Methylphenol (o-Cresol)	0.14	***5.0E-01***	1.0	0.0	0.0E+00	2.1E-01	1.0	5.1E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
2-Nitroaniline	0.14	***2.6E+00***	1.0	0.0	0.0E+00	***1.3E+00***	1.0	3.1E-01	0.10	***2.5E-02***	1.0	0.0	0.0E+00
2-Nitrophenol	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
3,3'-Dichlorobenzidine	0.14	***1.0E+00***	1.0	0.0	0.0E+00	***1.0E+00***	1.0	2.5E-01	0.10	***1.0E-02***	1.0	0.0	0.0E+00
3/4-Methylphenol (m&p-Cresol)	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
3-Nitroaniline	0.14	***2.6E+00***	1.0	0.0	0.0E+00	***1.3E+00***	1.0	3.1E-01	0.10	***2.5E-02***	1.0	0.0	0.0E+00
4,6-Dinitro-2-methylphenol	0.14	***2.6E+00***	1.0	0.0	0.0E+00	***1.3E+00***	1.0	3.1E-01	0.10	***2.5E-02***	1.0	0.0	0.0E+00
4-Bromophenyl Phenyl Ether	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
4-Chloro-3-methylphenol	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
4-Chloroaniline	0.14	***1.0E+00***	1.0	0.0	0.0E+00	***5.0E-01***	1.0	1.2E-01	0.10	***1.0E-02***	1.0	0.0	0.0E+00
4-Chlorophenyl Phenyl Ether	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
4-Nitroaniline	0.14	***2.6E+00***	1.0	0.0	0.0E+00	***1.3E+00***	1.0	3.1E-01	0.10	***2.5E-02***	1.0	0.0	0.0E+00
4-Nitrophenol	0.14	***2.6E+00***	1.0	0.0	0.0E+00	***1.3E+00***	1.0	3.1E-01	0.10	***2.5E-02***	1.0	0.0	0.0E+00
Acenaphthene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Acenaphthylene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Anthracene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Benzo(a)anthracene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Benzo(a)pyrene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	4.6E-03	1.0	0.0	0.0E+00
Benzo(b)fluoranthene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Benzo(g,h,i)perylene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	4.6E-03	1.0	0.0	0.0E+00
Benzo(k)fluoranthene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	5.2E-03	1.0	0.0	0.0E+00
bis(2-Chloroethoxy)methane	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
bis(2-Chloroethyl)ether	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
bis(2-Ethylhexyl)phthalate	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Butyl Benzyl Phthalate	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Carbazole	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Chrysene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Dibenzo(a,h)anthracene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Dibenzofuran	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Diethyl Phthalate	0.14	***5.0E-01***	1.0	0.0	0.0E+00	2.1E-01	1.0	5.1E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Dimethyl Phthalate	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Di-n-butylphthalate	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	4.6E-03	1.0	0.0	0.0E+00
Di-n-octylphthalate	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Fluoranthene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Fluorene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Hexachlorobenzene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Hexachlorobutadiene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Hexachlorocyclopentadiene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Hexachloroethane	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Indeno(1,2,3-cd)pyrene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	4.8E-03	1.0	0.0	0.0E+00
Isophorone	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Naphthalene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	4.9E-03	1.0	0.0	0.0E+00
Nitrobenzene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
N-Nitroso-di-n-propylamine	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
N-Nitrosodiphenylamine	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Pentachlorophenol	0.14	***2.6E-02***	1.0	0.0	0.0E+00	***1.3E+00***	1.0	3.1E-01	0.10	***5.0E-04***	1.0	0.0	0.0E+00
Phenanthrene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Phenol	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Pyrene	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***2.6E-01***	1.0	6.4E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - It was decided to adjust the dietary percentages of the pond fish/water and river fish/water to 0.0% and 100%, respectively, for the mink upstream modeling. This was done because the pond should not be included in the background investigation as it is an on-site hazard.
(c) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-19
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Upstream River 2002
Sauget, IL

Analyte	Concentration of Contaminant in River Surface Water (Plot 1 A-Line) (mg/L)	Dietary Percentage of River Surface Water (b)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (c)		Hazard Quotient	
SVOCs							(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.4E+01	5.0E+01	4.6E-03	1.3E-03
1,2-Dichlorobenzene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.0E+01	1.1E+03	8.0E-04	5.7E-05
1,3-Dichlorobenzene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.0E+01	1.1E+03	8.0E-04	5.7E-05
1,4-Dichlorobenzene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.0E+01	1.4E+02	8.0E-04	4.6E-04
2,2'-Oxybis(1-Chloropropane)	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	2.9E+01	1.6E+02	2.2E-03	4.0E-04
2,4,5-Trichlorophenol	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	9.4E+00	2.8E+01	6.9E-03	2.3E-03
2,4,6-Trichlorophenol	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	4.7E+02	2.8E+01	1.4E-04	2.3E-03
2,4-Dichlorophenol	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	2.8E-01	2.8E+00	2.3E-01	2.3E-02
2,4-Dimethylphenol	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	4.1E+00	2.0E+01	1.6E-02	3.2E-03
2,4-Dinitrophenol	***2.5E-02***	1.0	4.5E-03	0.55	1.0	3.2E-01	1.3E-03	1.3E-02	2.5E+02	2.5E+01
2,4-Dinitrotoluene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	2.3E-01	1.7E+00	2.8E-01	3.7E-02
2,6-Dinitrotoluene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	6.6E-01	6.6E+00	9.8E-02	9.8E-03
2-Chloronaphthalene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	2.0E+01	4.9E+01	3.2E-03	1.3E-03
2-Chlorophenol	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	4.7E+01	4.7E+00	1.4E-03	1.4E-02
2-Methylnaphthalene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	2.3E+03	2.3E+04	2.8E-05	2.8E-06
2-Methylphenol (o-Cresol)	***5.0E-03***	1.0	9.0E-04	0.55	1.0	5.2E-02	2.2E+02	2.2E+03	2.4E-04	2.4E-05
2-Nitroaniline	***2.5E-02***	1.0	4.5E-03	0.55	1.0	3.2E-01	3.9E+00	3.9E+01	8.0E-02	8.0E-03
2-Nitrophenol	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	2.3E+00	6.6E+00	2.7E-02	9.8E-03
3,3'-Dichlorobenzidine	***1.0E-02***	1.0	1.8E-03	0.55	1.0	2.5E-01	1.2E+01	4.1E+02	2.1E-02	6.1E-04
3/4-Methylphenol (m&p-Cresol)	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	2.2E+02	2.2E+03	2.9E-04	2.9E-05
3-Nitroaniline	***2.5E-02***	1.0	4.5E-03	0.55	1.0	3.2E-01	3.9E+00	3.9E+01	8.0E-02	8.0E-03
4,6-Dinitro-2-methylphenol	***2.5E-02***	1.0	4.5E-03	0.55	1.0	3.2E-01	2.3E-01	4.3E+00	1.3E+00	7.4E-02
4-Bromophenyl Phenyl Ether	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	9.4E-01	7.5E+00	6.9E-02	8.6E-03
4-Chloro-3-methylphenol	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.1E+02	1.1E+03	6.1E-04	6.1E-05
4-Chloroaniline	***1.0E-02***	1.0	1.8E-03	0.55	1.0	1.3E-01	1.2E+00	1.2E+01	1.1E-01	1.1E-02
4-Chlorophenyl Phenyl Ether	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	9.4E-01	7.5E+00	6.9E-02	8.6E-03
4-Nitroaniline	***2.5E-02***	1.0	4.5E-03	0.55	1.0	3.2E-01	3.9E+00	3.9E+01	8.0E-02	8.0E-03
4-Nitrophenol	***2.5E-02***	1.0	4.5E-03	0.55	1.0	3.2E-01	2.3E+00	6.6E+00	1.3E-01	4.8E-02
Acenaphthene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.4E+01	2.8E+01	4.5E-03	2.3E-03
Acenaphthylene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.4E+01	2.8E+01	4.5E-03	2.3E-03
Anthracene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.1E+01	8.1E+02	8.0E-04	8.0E-05
Benzo(a)anthracene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.1E-01	8.1E+00	8.0E-02	8.0E-03
Benzo(a)pyrene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.1E-01	8.1E+00	8.0E-02	8.0E-03
Benzo(b)fluoranthene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.1E-01	8.1E+00	8.0E-02	8.0E-03
Benzo(g,h,i)perylene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.1E-01	8.1E+00	8.0E-02	8.0E-03
Benzo(k)fluoranthene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.1E-01	8.1E+00	8.0E-02	8.0E-03
bis(2-Chloroethoxy)methane	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	2.9E+01	1.6E+02	2.2E-03	4.0E-04
bis(2-Chloroethyl)ether	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	2.9E+01	1.6E+02	2.2E-03	4.0E-04
bis(2-Ethylhexyl)phthalate	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.2E+02	1.2E+03	5.5E-04	5.5E-05
Butyl Benzyl Phthalate	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.5E+01	4.4E+01	4.3E-03	1.5E-03
Carbazole	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	2.4E+00	2.4E+01	2.7E-02	2.7E-03
Chrysene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.1E-01	8.1E+00	8.0E-02	8.0E-03
Dibenzo(a,h)anthracene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.1E-01	8.1E+00	8.0E-02	8.0E-03
Dibenzofuran	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.2E-02	1.2E-01	5.2E+00	5.2E-01
Diethyl Phthalate	***5.0E-03***	1.0	9.0E-04	0.55	1.0	5.2E-02	1.7E+03	1.7E+04	3.1E-05	3.1E-06
Dimethyl Phthalate	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	3.7E+03	3.7E+04	1.7E-05	1.7E-06
Di-n-butylphthalate	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.8E+03	6.1E+03	3.5E-05	1.0E-05
Di-n-octylphthalate	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	4.5E+02	1.5E+03	1.4E-04	4.3E-05
Fluoranthene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.0E+01	2.0E+01	6.4E-03	3.2E-03
Fluorene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.0E+01	2.0E+01	6.4E-03	3.2E-03
Hexachlorobenzene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	7.5E-02	2.7E-01	8.6E-01	2.4E-01
Hexachlorobutadiene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.9E-01	1.9E-01	3.4E-01	3.4E-01
Hexachlorocyclopentadiene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	5.6E-01	1.0E+00	1.1E-01	6.2E-02
Hexachloroethane	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	9.4E-02	1.4E+00	6.9E-01	4.6E-02
Indeno(1,2,3-cd)pyrene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.1E-01	8.1E+00	8.0E-02	8.0E-03
Isophorone	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.7E+01	1.7E+02	3.7E-03	3.8E-04
Naphthalene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	6.7E+00	1.3E+01	9.7E-03	4.8E-03
Nitrobenzene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	3.7E-02	3.7E-01	1.7E+00	1.7E-01
N-Nitroso-di-n-propylamine	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	8.1E-03	8.1E-02	8.0E+00	8.0E-01
N-Nitrosodiphenylamine	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.9E+02	4.7E+01	3.4E-04	1.4E-03
Pentachlorophenol	***5.0E-04***	1.0	9.0E-05	0.55	1.0	3.1E-01	2.0E-01	2.0E+00	1.6E+00	1.6E-01
Phenanthrene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	1.4E+01	2.8E+01	4.5E-03	2.3E-03
Phenol	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	5.6E+01	1.1E+02	1.1E-03	5.7E-04
Pyrene	***5.0E-03***	1.0	9.0E-04	0.55	1.0	6.4E-02	6.1E+00	1.0E+01	1.1E-02	6.4E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - It was decided to adjust the dietary percentages of the pond fish/water and river fish/water to 0.0% and 100%, respectively, for the mink upstream modeling. This was done because the pond should not be included in the background investigation as it is an on-site hazard.
(c) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-19
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Upstream River 2002
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Pond Fish (mg/kg)	Area Use Factor (a)	Dietary Percentage of Pond Fish (b)	Dose from Pond Fish (mg/kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Dietary Percentage of River Fish (b)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Surface Water (b)	Dose from Pond Surface Water (mg/kg/day)
Pesticides													
4,4'-DDD	0.14	***5.0E-03***	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	***5.0E-05***	1.0	0.0	0.0E+00
4,4'-DDE	0.14	***5.0E-03***	1.0	0.0	0.0E+00	2.1E-02	1.0	5.2E-03	0.10	***5.0E-05***	1.0	0.0	0.0E+00
4,4'-DDT	0.14	***2.0E-02***	1.0	0.0	0.0E+00	1.5E-02	1.0	3.7E-03	0.10	4.8E-05	1.0	0.0	0.0E+00
Aldrin	0.14	***2.6E-03***	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	2.3E-05	1.0	0.0	0.0E+00
alpha-BHC	0.14	***2.6E-03***	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	***2.5E-05***	1.0	0.0	0.0E+00
alpha-Chlordane	0.14	***2.6E-03***	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	***2.5E-05***	1.0	0.0	0.0E+00
beta-BHC	0.14	***2.6E-03***	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	2.3E-05	1.0	0.0	0.0E+00
delta-BHC	0.14	2.4E-02	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	***2.5E-05***	1.0	0.0	0.0E+00
Dieldrin	0.14	1.4E-01	1.0	0.0	0.0E+00	2.1E-02	1.0	5.3E-03	0.10	4.1E-05	1.0	0.0	0.0E+00
Endosulfan I	0.14	***2.6E-03***	1.0	0.0	0.0E+00	1.4E-02	1.0	3.4E-03	0.10	***2.5E-05***	1.0	0.0	0.0E+00
Endosulfan II	0.14	***5.0E-03***	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	***5.0E-05***	1.0	0.0	0.0E+00
Endosulfan Sulfate	0.14	***5.0E-03***	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	***5.0E-05***	1.0	0.0	0.0E+00
Endrin	0.14	***5.0E-03***	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	***5.0E-05***	1.0	0.0	0.0E+00
Endrin Aldehyde	0.14	***5.0E-03***	1.0	0.0	0.0E+00	1.3E-02	1.0	3.1E-03	0.10	***5.0E-05***	1.0	0.0	0.0E+00
Endrin Ketone	0.14	3.6E-03	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	***5.0E-05***	1.0	0.0	0.0E+00
gamma-BHC (Lindane)	0.14	***2.6E-03***	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	***2.5E-05***	1.0	0.0	0.0E+00
gamma-Chlordane	0.14	***2.6E-03***	1.0	0.0	0.0E+00	1.4E-02	1.0	3.6E-03	0.10	***2.5E-05***	1.0	0.0	0.0E+00
Heptachlor	0.14	***2.6E-03***	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	***2.5E-05***	1.0	0.0	0.0E+00
Heptachlor Epoxide	0.14	***2.6E-03***	1.0	0.0	0.0E+00	***1.7E-02***	1.0	4.2E-03	0.10	***2.5E-05***	1.0	0.0	0.0E+00
Methoxychlor	0.14	***2.6E-02***	1.0	0.0	0.0E+00	***6.7E-02***	1.0	1.7E-02	0.10	***2.5E-04***	1.0	0.0	0.0E+00
Toxaphene	0.14	***2.6E-01***	1.0	0.0	0.0E+00	***5.7E-01***	1.0	1.4E-01	0.10	***2.5E-03***	1.0	0.0	0.0E+00
Herbicides													
2,4-D	0.14	***1.3E-02***	1.0	0.0	0.0E+00	***4.2E-03***	1.0	1.0E-03	0.10	***2.5E-04***	1.0	0.0	0.0E+00
2,4-DB	0.14	***1.3E-02***	1.0	0.0	0.0E+00	***4.2E-03***	1.0	1.0E-03	0.10	***2.5E-04***	1.0	0.0	0.0E+00
2,4,5-T	0.14	***1.3E-02***	1.0	0.0	0.0E+00	5.1E-03	1.0	1.3E-03	0.10	***2.5E-04***	1.0	0.0	0.0E+00
2,4,5-TP (Silvex)	0.14	***1.3E-02***	1.0	0.0	0.0E+00	5.3E-03	1.0	1.3E-03	0.10	***2.5E-04***	1.0	0.0	0.0E+00
Dalapon	0.14	***3.0E+00***	1.0	0.0	0.0E+00	***1.0E+00***	1.0	2.5E-01	0.10	***6.0E-02***	1.0	0.0	0.0E+00
Dicamba	0.14	***3.0E-02***	1.0	0.0	0.0E+00	7.2E-03	1.0	1.8E-03	0.10	***6.0E-04***	1.0	0.0	0.0E+00
Dichlorprop	0.14	***1.5E-01***	1.0	0.0	0.0E+00	***5.0E-02***	1.0	1.2E-02	0.10	***3.0E-03***	1.0	0.0	0.0E+00
Dinoseb	0.14	***5.0E-01***	1.0	0.0	0.0E+00	***5.0E-02***	1.0	1.2E-02	0.10	***5.0E-03***	1.0	0.0	0.0E+00
MCPA	0.14	***3.0E+00***	1.0	0.0	0.0E+00	***1.0E+00***	1.0	2.5E-01	0.10	***6.0E-02***	1.0	0.0	0.0E+00
MCPP	0.14	***3.0E+00***	1.0	0.0	0.0E+00	***1.0E+00***	1.0	2.5E-01	0.10	***6.0E-02***	1.0	0.0	0.0E+00
PCBs													
Total PCBs	0.14	8.4E+00	1.0	0.0	0.0E+00	***2.5E-02***	1.0	6.2E-03	0.10	2.3E-04	1.0	0.0	0.0E+00
Dioxins/Furans (d)													
TEQ	0.14	9.9E-06	1.0	0.0	0.0E+00	1.8E-06	1.0	4.4E-07	0.10	8.1E-09	1.0	0.0	0.0E+00
Metals (e)													
Aluminum	0.14	1.6E+01	1.0	0.0	0.0E+00	1.8E+00	1.0	4.5E-01	0.10	1.1E+00	1.0	0.0	0.0E+00
Antimony	0.14	***9.0E-01***	1.0	0.0	0.0E+00	***4.0E-01***	1.0	1.0E-01	0.10	***8.3E-03***	1.0	0.0	0.0E+00
Arsenic	0.14	7.3E-01	1.0	0.0	0.0E+00	***5.7E-01***	1.0	1.4E-01	0.10	5.1E-03	1.0	0.0	0.0E+00
Barium	0.14	5.3E+00	1.0	0.0	0.0E+00	3.7E+01	1.0	9.2E+00	0.10	1.4E-01	1.0	0.0	0.0E+00
Beryllium	0.14	***1.8E-01***	1.0	0.0	0.0E+00	***1.2E-01***	1.0	3.1E-02	0.10	***2.0E-03***	1.0	0.0	0.0E+00
Cadmium	0.14	***2.3E-01***	1.0	0.0	0.0E+00	***2.3E+00***	1.0	5.6E-01	0.10	2.3E-03	1.0	0.0	0.0E+00
Chromium	0.14	3.3E-01	1.0	0.0	0.0E+00	***9.5E-02***	1.0	2.4E-02	0.10	5.1E-03	1.0	0.0	0.0E+00
Cobalt	0.14	***4.6E-01***	1.0	0.0	0.0E+00	6.4E+00	1.0	1.6E+00	0.10	5.5E-03	1.0	0.0	0.0E+00
Copper	0.14	9.1E-01	1.0	0.0	0.0E+00	***7.1E+00***	1.0	1.8E+00	0.10	7.3E-03	1.0	0.0	0.0E+00
Lead	0.14	***2.3E-01***	1.0	0.0	0.0E+00	***2.3E-04***	1.0	5.6E-05	0.10	4.0E-03	1.0	0.0	0.0E+00
Manganese	0.14	9.9E+00	1.0	0.0	0.0E+00	1.4E+02	1.0	3.5E+01	0.10	1.1E-01	1.0	0.0	0.0E+00
Mercury	0.14	6.2E-02	1.0	0.0	0.0E+00	***1.1E+00***	1.0	2.8E-01	0.10	9.7E-05	1.0	0.0	0.0E+00
Nickel	0.14	***1.8E+00***	1.0	0.0	0.0E+00	***1.6E+00***	1.0	3.9E-01	0.10	1.4E-02	1.0	0.0	0.0E+00
Selenium	0.14	***4.6E-01***	1.0	0.0	0.0E+00	***6.5E-01***	1.0	1.6E-01	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Silver	0.14	***4.6E-01***	1.0	0.0	0.0E+00	***4.4E-01***	1.0	1.1E-01	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Thallium	0.14	***4.6E-01***	1.0	0.0	0.0E+00	***5.0E+01***	1.0	1.2E+01	0.10	***5.0E-03***	1.0	0.0	0.0E+00
Vanadium	0.14	***4.6E-01***	1.0	0.0	0.0E+00	***8.7E+00***	1.0	2.2E+00	0.10	5.7E-03	1.0	0.0	0.0E+00
Zinc	0.14	4.6E+01	1.0	0.0	0.0E+00	***2.1E+01***	1.0	5.1E+00	0.10	2.2E-02	1.0	0.0	0.0E+00

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - It was decided to adjust the dietary percentages of the pond fish/water and river fish/water to 0.0% and 100%, respectively, for the mink upstream modeling. This was done because the pond should not be included in the background investigation as it is an on-site hazard.
(c) - See Table III-C1.
(d) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.
(e) - Metals were not analyzed for whole-body river fish tissue. Therefore, the surface water values were multiplied by their surface water-to-fish bioconcentration factors (BCFs) (USEPA, 1999). See Table III-B10.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-19
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Upstream River 2002
Sauget, IL

Analyte	Concentration of Contaminant in River Surface Water (Plot 1 A-Line) (mg/L)	Dietary Percentage of River Surface Water (b)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (c)		Hazard Quotient	
							(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides										
4,4'-DDD	***5.0E-05***	1.0	9.0E-06	0.55	1.0	4.2E-03	1.1E+00	5.3E+00	3.9E-03	7.9E-04
4,4'-DDE	***5.0E-05***	1.0	9.0E-06	0.55	1.0	5.2E-03	1.1E+00	5.3E+00	4.9E-03	9.9E-04
4,4'-DDT	***5.0E-05***	1.0	9.0E-06	0.55	1.0	3.8E-03	1.1E+00	5.3E+00	3.5E-03	7.1E-04
Aldrin	***2.5E-05***	1.0	4.5E-06	0.55	1.0	4.2E-03	1.7E-01	8.6E-01	2.4E-02	4.8E-03
alpha-BHC	***2.5E-05***	1.0	4.5E-06	0.55	1.0	4.2E-03	1.4E-02	1.4E-01	3.0E-01	3.0E-02
alpha-Chlordane	***2.5E-05***	1.0	4.5E-06	0.55	1.0	4.2E-03	2.5E+00	5.1E+00	1.6E-03	8.2E-04
beta-BHC	***2.5E-05***	1.0	4.5E-06	0.55	1.0	4.2E-03	3.4E-01	1.7E+00	1.2E-02	2.4E-03
delta-BHC	***2.5E-05***	1.0	4.5E-06	0.55	1.0	4.2E-03	1.4E-02	1.4E-01	3.0E-01	3.0E-02
Dieldrin	***5.0E-05***	1.0	9.0E-06	0.55	1.0	5.3E-03	2.1E-02	2.1E-01	2.5E-01	2.5E-02
Endosulfan I	***2.5E-05***	1.0	4.5E-06	0.55	1.0	3.4E-03	9.5E-02	9.5E-01	3.6E-02	3.6E-03
Endosulfan II	***5.0E-05***	1.0	9.0E-06	0.55	1.0	4.2E-03	9.5E-02	9.5E-01	4.4E-02	4.4E-03
Endosulfan Sulfate	***5.0E-05***	1.0	9.0E-06	0.55	1.0	4.2E-03	9.5E-02	9.5E-01	4.4E-02	4.4E-03
Endrin	***5.0E-05***	1.0	9.0E-06	0.55	1.0	4.2E-03	8.2E-02	8.2E-01	5.1E-02	5.1E-03
Endrin Aldehyde	***5.0E-05***	1.0	9.0E-06	0.55	1.0	3.1E-03	8.2E-02	8.2E-01	3.8E-02	3.8E-03
Endrin Ketone	3.0E-05	1.0	5.3E-06	0.55	1.0	4.2E-03	8.2E-02	8.2E-01	5.1E-02	5.1E-03
gamma-BHC (Lindane)	***2.5E-05***	1.0	4.5E-06	0.55	1.0	4.2E-03	5.3E+00	5.3E+01	7.8E-04	7.8E-05
gamma-Chlordane	***2.5E-05***	1.0	4.5E-06	0.55	1.0	3.6E-03	2.5E+00	5.1E+00	1.4E-03	7.1E-04
Heptachlor	***2.5E-05***	1.0	4.5E-06	0.55	1.0	4.2E-03	1.0E-01	1.0E+00	4.2E-02	4.2E-03
Heptachlor Epoxide	***2.5E-05***	1.0	4.5E-06	0.55	1.0	4.2E-03	1.4E-03	1.0E-02	3.0E+00	4.1E-01
Methoxychlor	***2.5E-04***	1.0	4.5E-05	0.55	1.0	1.7E-02	5.1E+00	1.0E+01	3.3E-03	1.6E-03
Toxaphene	***2.5E-03***	1.0	4.5E-04	0.55	1.0	1.4E-01	8.0E+00	8.0E+01	1.8E-02	1.8E-03
Herbicides										
2,4-D	***2.5E-04***	1.0	4.5E-05	0.55	1.0	1.1E-03	8.1E-01	4.1E+00	1.3E-03	2.7E-04
2,4-DB	***2.5E-04***	1.0	4.5E-05	0.55	1.0	1.1E-03	1.3E+00	4.1E+00	8.1E-04	2.6E-04
2,4,5-T	***2.5E-04***	1.0	4.5E-05	0.55	1.0	1.3E-03	2.8E+00	9.4E+00	4.7E-04	1.4E-04
2,4,5-TP (Silvex)	***2.5E-04***	1.0	4.5E-05	0.55	1.0	1.4E-03	8.7E-01	2.9E+00	1.6E-03	4.7E-04
Dalapon	***6.0E-02***	1.0	1.1E-02	0.55	1.0	2.6E-01	7.9E+00	2.7E+01	3.3E-02	9.6E-03
Dicamba	***6.0E-04***	1.0	1.1E-04	0.55	1.0	1.9E-03	3.0E+00	1.0E+01	6.3E-04	1.9E-04
Dichlorprop	***3.0E-03***	1.0	5.4E-04	0.55	1.0	1.3E-02	1.6E-01	1.6E+00	8.0E-02	8.0E-03
Dinoseb	***5.0E-03***	1.0	9.0E-04	0.55	1.0	1.3E-02	9.4E-02	9.4E-01	1.4E-01	1.4E-02
MCPA	***6.0E-02***	1.0	1.1E-02	0.55	1.0	2.6E-01	1.7E-01	8.7E-01	1.5E+00	3.0E-01
MCPP	***6.0E-02***	1.0	1.1E-02	0.55	1.0	2.6E-01	2.8E-01	8.5E-01	9.2E-01	3.1E-01
PCBs										
Total PCBs	***2.5E-04***	1.0	4.5E-05	0.55	1.0	6.3E-03	9.4E-02	9.4E-01	6.7E-02	6.7E-03
Dioxins/Furans (d)										
TEQ	***2.1E-09***	1.0	3.8E-10	0.55	1.0	4.4E-07	9.4E-07	9.4E-06	4.7E-01	4.7E-02
Metals (e)										
Aluminum	6.6E-01	1.0	1.2E-01	0.55	1.0	5.7E-01	1.6E+00	1.6E+01	3.6E-01	3.6E-02
Antimony	***1.0E-02***	1.0	1.8E-03	0.55	1.0	1.0E-01	1.0E-01	1.0E+00	1.0E+00	1.0E-01
Arsenic	***5.0E-03***	1.0	9.0E-04	0.55	1.0	1.4E-01	8.1E-02	8.1E-01	1.8E+00	1.8E-01
Barium	5.8E-02	1.0	1.1E-02	0.55	1.0	9.2E+00	3.9E+00	1.5E+01	2.4E+00	6.1E-01
Beryllium	***2.0E-03***	1.0	3.6E-04	0.55	1.0	3.1E-02	6.2E-01	6.2E+00	5.0E-02	5.0E-03
Cadmium	***2.5E-03***	1.0	4.5E-04	0.55	1.0	5.7E-01	5.6E-01	5.6E+00	1.0E+00	1.0E-01
Chromium	***5.0E-03***	1.0	9.0E-04	0.55	1.0	2.5E-02	3.1E+00	1.2E+01	8.0E-03	2.0E-03
Cobalt	3.7E-03	1.0	6.7E-04	0.55	1.0	1.6E+00	4.7E-02	4.7E-01	3.4E+01	3.4E+00
Copper	***1.0E-02***	1.0	1.8E-03	0.55	1.0	1.8E+00	1.2E+01	1.5E+01	1.5E-01	1.1E-01
Lead	***2.5E-03***	1.0	4.5E-04	0.55	1.0	5.1E-04	7.5E+00	7.5E+01	6.7E-05	6.7E-06
Manganese	8.1E-02	1.0	1.5E-02	0.55	1.0	3.5E+01	8.3E+01	2.7E+02	4.3E-01	1.3E-01
Mercury	***1.0E-04***	1.0	1.8E-05	0.55	1.0	2.8E-01	1.5E-02	2.5E-02	1.9E+01	1.1E+01
Nickel	***2.0E-02***	1.0	3.6E-03	0.55	1.0	3.9E-01	3.8E+01	7.5E+01	1.0E-02	5.2E-03
Selenium	***5.0E-03***	1.0	9.0E-04	0.55	1.0	1.6E-01	2.0E-01	3.3E-01	8.0E-01	4.8E-01
Silver	***5.0E-03***	1.0	9.0E-04	0.55	1.0	1.1E-01	1.5E-01	1.5E+00	7.5E-01	7.5E-02
Thallium	***5.0E-03***	1.0	9.0E-04	0.55	1.0	1.2E+01	6.0E-03	6.0E-02	2.1E+03	2.1E+02
Vanadium	***5.0E-03***	1.0	9.0E-04	0.55	1.0	2.2E+00	2.6E-01	2.6E+00	8.3E+00	8.3E-01
Zinc	***1.0E-02***	1.0	1.8E-03	0.55	1.0	5.1E+00	1.4E+02	2.7E+02	3.7E-02	1.9E-02

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - It was decided to adjust the dietary percentages of the pond fish/water and river fish/water to 0.0% and 100%, respectively, for the mink upstream modeling. This was done because the pond should not be included in the background investigation as it is an on-site hazard.
(c) - See Table III-C1.
(d) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.
(e) - Metals were not analyzed for whole-body river fish tissue. Therefore, the surface water values were multiplied by their surface water-to-fish bioconcentration factors (BCFs) (USEPA, 1999). See Table III-B10.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-20
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Adjacent River 2002
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Pond Fish (mg/kg)	Area Use Factor (a)	Dietary Percentage of Pond Fish (b)	Dose from Pond Fish (mg/kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Dietary Percentage of River Fish (b)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Surface Water (b)	Dose from Pond Surface Water (mg/kg/day)
SVOCs													
1,2,4-Trichlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
1,2-Dichlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	2.3E-01	0.72	4.1E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
1,3-Dichlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
1,4-Dichlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	2.4E-01	0.72	4.3E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,2'-Oxybis(1-Chloropropane)	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4,5-Trichlorophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4,6-Trichlorophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4-Dichlorophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	2.3E-01	0.72	4.1E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4-Dimethylphenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4-Dinitrophenol	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
2,4-Dinitrotoluene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,6-Dinitrotoluene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Chloronaphthalene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Chlorophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Methylnaphthalene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Methylphenol (o-Cresol)	0.14	***5.0E-01***	1.0	0.28	3.5E-02	2.2E-01	0.72	4.0E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Nitroaniline	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
2-Nitrophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
3,3'-Dichlorobenzidine	0.14	***1.0E+00***	1.0	0.28	7.0E-02	***1.0E+00***	0.72	1.8E-01	0.10	***1.0E-02***	1.0	0.28	5.0E-04
3/4-Methylphenol (m&p-Cresol)	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
3-Nitroaniline	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
4,6-Dinitro-2-methylphenol	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
4-Bromophenyl Phenyl Ether	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
4-Chloro-3-methylphenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
4-Chloroaniline	0.14	***1.0E+00***	1.0	0.28	7.0E-02	***5.0E-01***	0.72	8.9E-02	0.10	***1.0E-02***	1.0	0.28	5.0E-04
4-Chlorophenyl Phenyl Ether	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
4-Nitroaniline	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
4-Nitrophenol	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
Acenaphthene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Acenaphthylene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Anthracene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Benzo(a)anthracene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Benzo(a)pyrene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.6E-03	1.0	0.28	2.3E-04
Benzo(b)fluoranthene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Benzo(g,h,i)perylene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.6E-03	1.0	0.28	2.3E-04
Benzo(k)fluoranthene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	5.2E-03	1.0	0.28	2.6E-04
bis(2-Chloroethoxy)methane	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
bis(2-Chloroethyl)ether	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
bis(2-Ethylhexyl)phthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Butyl Benzyl Phthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Carbazole	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Chrysene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Dibenzo(a,h)anthracene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Dibenzofuran	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Diethyl Phthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Dimethyl Phthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Di-n-butylphthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.6E-03	1.0	0.28	2.3E-04
Di-n-octylphthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Fluoranthene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Fluorene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Hexachlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Hexachlorobutadiene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Hexachlorocyclopentadiene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Hexachloroethane	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Indeno(1,2,3-cd)pyrene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.8E-03	1.0	0.28	2.4E-04
Isophorone	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Naphthalene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.9E-03	1.0	0.28	2.5E-04
Nitrobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
N-Nitroso-di-n-propylamine	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
N-Nitrosodiphenylamine	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Pentachlorophenol	0.14	***2.6E-02***	1.0	0.28	1.8E-03	***1.3E+00***	0.72	2.2E-01	0.10	***5.0E-04***	1.0	0.28	2.5E-05
Phenanthrene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Phenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Pyrene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - The dietary percentage of the pond and river fish/water were calculated by dividing the length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond fish/water ingestion = (1,375+2,770)/14956 = 0.28.
(c) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-20
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Adjacent River 2002
Sauget, IL

Analyte	Concentration of Contaminant in River Surface Water (All near shore sample locations except Plots 1 and 6) (mg/L)	Dietary Percentage of River Surface Water (b)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (c)		Hazard Quotient	
SVOCs							(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.4E+01	5.0E+01	5.8E-03	1.6E-03
1,2-Dichlorobenzene	7.5E-03	0.72	9.7E-04	0.55	1.0	7.7E-02	8.0E+01	1.1E+03	9.5E-04	6.8E-05
1,3-Dichlorobenzene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.0E+01	1.1E+03	1.0E-03	7.2E-05
1,4-Dichlorobenzene	4.9E-03	0.72	6.4E-04	0.55	1.0	7.9E-02	8.0E+01	1.4E+02	9.8E-04	5.6E-04
2,2'-Oxybis(1-Chloropropane)	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.9E+01	1.6E+02	2.8E-03	5.1E-04
2,4,5-Trichlorophenol	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	9.4E+00	2.8E+01	8.6E-03	2.9E-03
2,4,6-Trichlorophenol	5.9E-03	0.72	7.6E-04	0.55	1.0	8.1E-02	4.7E+02	2.8E+01	1.7E-04	2.9E-03
2,4-Dichlorophenol	8.3E-03	0.72	1.1E-03	0.55	1.0	7.7E-02	2.8E-01	2.8E+00	2.7E-01	2.7E-02
2,4-Dimethylphenol	5.2E-03	0.72	6.8E-04	0.55	1.0	8.1E-02	4.1E+00	2.0E+01	2.0E-02	4.0E-03
2,4-Dinitrophenol	***2.5E-02***	0.72	3.2E-03	0.55	1.0	4.1E-01	1.3E-03	1.3E-02	3.2E+02	3.2E+01
2,4-Dinitrotoluene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.3E-01	1.7E+00	3.5E-01	4.6E-02
2,6-Dinitrotoluene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	6.6E-01	6.6E+00	1.2E-01	1.2E-02
2-Chloronaphthalene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.0E+01	4.9E+01	4.0E-03	1.7E-03
2-Chlorophenol	5.9E-03	0.72	7.7E-04	0.55	1.0	8.1E-02	4.7E+01	4.7E+00	1.7E-03	1.7E-02
2-Methylnaphthalene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.3E+03	2.3E+04	3.5E-05	3.5E-06
2-Methylphenol (o-Cresol)	***5.0E-03***	0.72	6.5E-04	0.55	1.0	7.5E-02	2.2E+02	2.2E+03	3.4E-04	3.4E-05
2-Nitroaniline	***2.5E-02***	0.72	3.2E-03	0.55	1.0	4.1E-01	3.9E+00	3.9E+01	1.0E-01	1.0E-02
2-Nitrophenol	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.3E+00	6.6E+00	3.5E-02	1.2E-02
3,3'-Dichlorobenzidine	***1.0E-02***	0.72	1.3E-03	0.55	1.0	2.5E-01	1.2E+01	4.1E+02	2.1E-02	6.1E-04
3/4-Methylphenol (m&p-Cresol)	6.6E-03	0.72	8.5E-04	0.55	1.0	8.1E-02	2.2E+02	2.2E+03	3.7E-04	3.7E-05
3-Nitroaniline	***2.5E-02***	0.72	3.2E-03	0.55	1.0	4.1E-01	3.9E+00	3.9E+01	1.0E-01	1.0E-02
4,6-Dinitro-2-methylphenol	***2.5E-02***	0.72	3.2E-03	0.55	1.0	4.1E-01	2.3E-01	4.3E+00	1.7E+00	9.5E-02
4-Bromophenyl Phenyl Ether	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	9.4E-01	7.5E+00	8.6E-02	1.1E-02
4-Chloro-3-methylphenol	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.1E+02	1.1E+03	7.7E-04	7.7E-05
4-Chloroaniline	1.8E-02	0.72	2.4E-03	0.55	1.0	1.6E-01	1.2E+00	1.2E+01	1.4E-01	1.4E-02
4-Chlorophenyl Phenyl Ether	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	9.4E-01	7.5E+00	8.6E-02	1.1E-02
4-Nitroaniline	***2.5E-02***	0.72	3.2E-03	0.55	1.0	4.1E-01	3.9E+00	3.9E+01	1.0E-01	1.0E-02
4-Nitrophenol	***2.5E-02***	0.72	3.2E-03	0.55	1.0	4.1E-01	2.3E+00	6.6E+00	1.7E-01	6.2E-02
Acenaphthene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.4E+01	2.8E+01	5.7E-03	2.9E-03
Acenaphthylene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.4E+01	2.8E+01	5.7E-03	2.9E-03
Anthracene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E+01	8.1E+02	1.0E-03	1.0E-04
Benzo(a)anthracene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Benzo(a)pyrene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Benzo(b)fluoranthene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Benzo(g,h,i)perylene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Benzo(k)fluoranthene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
bis(2-Chloroethoxy)methane	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.9E+01	1.6E+02	2.8E-03	5.1E-04
bis(2-Chloroethyl)ether	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.9E+01	1.6E+02	2.8E-03	5.1E-04
bis(2-Ethylhexyl)phthalate	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.2E+02	1.2E+03	6.9E-04	6.9E-05
Butyl Benzyl Phthalate	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.5E+01	4.4E+01	5.4E-03	1.8E-03
Carbazole	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.4E+00	2.4E+01	3.3E-02	3.3E-03
Chrysene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Dibenzo(a,h)anthracene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Dibenzofuran	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.2E-02	1.2E-01	6.6E+00	6.6E-01
Diethyl Phthalate	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.7E+03	1.7E+04	4.8E-05	4.8E-06
Dimethyl Phthalate	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	3.7E+03	3.7E+04	2.2E-05	2.2E-06
Di-n-butylphthalate	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.8E+03	6.1E+03	4.4E-05	1.3E-05
Di-n-octylphthalate	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	4.5E+02	1.5E+03	1.8E-04	5.5E-05
Fluoranthene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.0E+01	2.0E+01	8.0E-03	4.0E-03
Fluorene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.0E+01	2.0E+01	8.0E-03	4.0E-03
Hexachlorobenzene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	7.5E-02	2.7E-01	1.1E+00	3.0E-01
Hexachlorobutadiene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.9E-01	1.9E-01	4.3E-01	4.3E-01
Hexachlorocyclopentadiene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	5.6E-01	1.0E+00	1.4E-01	7.9E-02
Hexachloroethane	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	9.4E-02	1.4E+00	8.6E-01	5.8E-02
Indeno(1,2,3-cd)pyrene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Isophorone	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.7E+01	1.7E+02	4.6E-03	4.8E-04
Naphthalene	6.1E-03	0.72	8.0E-04	0.55	1.0	8.1E-02	6.7E+00	1.3E+01	1.2E-02	6.1E-03
Nitrobenzene	4.8E-03	0.72	6.2E-04	0.55	1.0	8.1E-02	3.7E-02	3.7E-01	2.2E+00	2.2E-01
N-Nitroso-di-n-propylamine	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-03	8.1E-02	1.0E+01	1.0E+00
N-Nitrosodiphenylamine	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.9E+02	4.7E+01	4.3E-04	1.7E-03
Pentachlorophenol	6.0E-04	0.72	7.8E-05	0.55	1.0	2.3E-01	2.0E-01	2.0E+00	1.1E+00	1.1E-01
Phenanthrene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.4E+01	2.8E+01	5.7E-03	2.9E-03
Phenol	6.1E-03	0.72	7.9E-04	0.55	1.0	8.1E-02	5.6E+01	1.1E+02	1.4E-03	7.2E-04
Pyrene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	6.1E+00	1.0E+01	1.3E-02	8.0E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - The dietary percentage of the pond and river fish/water were calculated by dividing the length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond fish/water ingestion = (1,375+2,770)/14956 = 0.28.
(c) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-20
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Adjacent River 2002
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Pond Fish (mg/kg)	Area Use Factor (a)	Dietary Percentage of Pond Fish (b)	Dose from Pond Fish (mg/kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Dietary Percentage of River Fish (b)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Surface Water (b)	Dose from Pond Surface Water (mg/kg/day)
Pesticides													
4,4'-DDD	0.14	***5.0E-03***	1.0	0.28	3.5E-04	1.1E-02	0.72	2.0E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
4,4'-DDE	0.14	***5.0E-03***	1.0	0.28	3.5E-04	1.8E-02	0.72	3.3E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
4,4'-DDT	0.14	***2.0E-02***	1.0	0.28	1.4E-03	1.3E-02	0.72	2.3E-03	0.10	4.8E-05	1.0	0.28	2.4E-06
Aldrin	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.3E-02***	0.72	2.2E-03	0.10	2.3E-05	1.0	0.28	1.2E-06
alpha-BHC	0.14	***2.6E-03***	1.0	0.28	1.8E-04	1.1E-02	0.72	2.0E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
alpha-Chlordane	0.14	***2.6E-03***	1.0	0.28	1.8E-04	1.2E-02	0.72	2.1E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
beta-BHC	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.3E-02***	0.72	2.2E-03	0.10	2.3E-05	1.0	0.28	1.2E-06
delta-BHC	0.14	2.4E-02	1.0	0.28	1.7E-03	***1.3E-02***	0.72	2.2E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Dieldrin	0.14	1.4E-01	1.0	0.28	9.8E-03	1.5E-02	0.72	2.7E-03	0.10	4.1E-05	1.0	0.28	2.0E-06
Endosulfan I	0.14	***2.6E-03***	1.0	0.28	1.8E-04	1.2E-02	0.72	2.1E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Endosulfan II	0.14	***5.0E-03***	1.0	0.28	3.5E-04	***1.3E-02***	0.72	2.2E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
Endosulfan Sulfate	0.14	***5.0E-03***	1.0	0.28	3.5E-04	***1.3E-02***	0.72	2.2E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
Endrin	0.14	***5.0E-03***	1.0	0.28	3.5E-04	1.2E-02	0.72	2.2E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
Endrin Aldehyde	0.14	***5.0E-03***	1.0	0.28	3.5E-04	1.2E-02	0.72	2.1E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
Endrin Ketone	0.14	3.6E-03	1.0	0.28	2.5E-04	***1.3E-02***	0.72	2.2E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
gamma-BHC (Lindane)	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.3E-02***	0.72	2.2E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
gamma-Chlordane	0.14	***2.6E-03***	1.0	0.28	1.8E-04	1.1E-02	0.72	2.0E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Heptachlor	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.3E-02***	0.72	2.2E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Heptachlor Epoxide	0.14	***2.6E-03***	1.0	0.28	1.8E-04	1.1E-02	0.72	1.9E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Methoxychlor	0.14	***2.6E-02***	1.0	0.28	1.8E-03	***5.0E-02***	0.72	9.0E-03	0.10	***2.5E-04***	1.0	0.28	1.3E-05
Toxaphene	0.14	***2.6E-01***	1.0	0.28	1.8E-02	***4.3E-01***	0.72	7.6E-02	0.10	***2.5E-03***	1.0	0.28	1.3E-04
Herbicides													
2,4-D	0.14	***1.3E-02***	1.0	0.28	8.7E-04	***4.2E-03***	0.72	7.4E-04	0.10	***2.5E-04***	1.0	0.28	1.3E-05
2,4-DB	0.14	***1.3E-02***	1.0	0.28	8.7E-04	***4.2E-03***	0.72	7.4E-04	0.10	***2.5E-04***	1.0	0.28	1.3E-05
2,4,5-T	0.14	***1.3E-02***	1.0	0.28	8.7E-04	5.7E-03	0.72	1.0E-03	0.10	***2.5E-04***	1.0	0.28	1.3E-05
2,4,5-TP (Silvex)	0.14	***1.3E-02***	1.0	0.28	8.7E-04	4.9E-03	0.72	8.7E-04	0.10	***2.5E-04***	1.0	0.28	1.3E-05
Dalapon	0.14	***3.0E+00***	1.0	0.28	2.1E-01	***1.0E+00***	0.72	1.8E-01	0.10	***6.0E-02***	1.0	0.28	3.0E-03
Dicamba	0.14	***3.0E-02***	1.0	0.28	2.1E-03	***1.0E-02***	0.72	1.8E-03	0.10	***6.0E-04***	1.0	0.28	3.0E-05
Dichlorprop	0.14	***1.5E-01***	1.0	0.28	1.0E-02	***5.0E-02***	0.72	9.0E-03	0.10	***3.0E-03***	1.0	0.28	1.5E-04
Dinoseb	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***5.0E-02***	0.72	9.0E-03	0.10	***5.0E-03***	1.0	0.28	2.5E-04
MCPA	0.14	***3.0E+00***	1.0	0.28	2.1E-01	***1.0E+00***	0.72	1.8E-01	0.10	***6.0E-02***	1.0	0.28	3.0E-03
MCPP	0.14	***3.0E+00***	1.0	0.28	2.1E-01	2.3E+00	0.72	4.1E-01	0.10	***6.0E-02***	1.0	0.28	3.0E-03
PCBs													
Total PCBs	0.14	8.4E+00	1.0	0.28	5.9E-01	***2.5E-02***	0.72	4.5E-03	0.10	2.3E-04	1.0	0.28	1.1E-05
Dioxins/Furans (d)													
TEQ	0.14	9.9E-06	1.0	0.28	6.9E-07	1.5E-06	0.72	2.6E-07	0.10	8.1E-09	1.0	0.28	4.1E-10
Metals (e)													
Aluminum	0.14	1.6E+01	1.0	0.28	1.1E+00	2.1E+00	0.72	3.8E-01	0.10	1.1E+00	1.0	0.28	5.4E-02
Antimony	0.14	***9.0E-01***	1.0	0.28	6.3E-02	***4.0E-01***	0.72	7.2E-02	0.10	***8.3E-03***	1.0	0.28	4.2E-04
Arsenic	0.14	7.3E-01	1.0	0.28	5.1E-02	5.7E-01	0.72	1.0E-01	0.10	5.1E-03	1.0	0.28	2.5E-04
Barium	0.14	5.3E+00	1.0	0.28	3.7E-01	3.9E+01	0.72	7.0E+00	0.10	1.4E-01	1.0	0.28	7.1E-03
Beryllium	0.14	***1.8E-01***	1.0	0.28	1.3E-02	***1.2E-01***	0.72	2.2E-02	0.10	***2.0E-03***	1.0	0.28	1.0E-04
Cadmium	0.14	***2.3E-01***	1.0	0.28	1.6E-02	***2.3E+00***	0.72	4.1E-01	0.10	2.3E-03	1.0	0.28	1.1E-04
Chromium	0.14	3.3E-01	1.0	0.28	2.3E-02	***9.5E-02***	0.72	1.7E-02	0.10	5.1E-03	1.0	0.28	2.6E-04
Cobalt	0.14	***4.6E-01***	1.0	0.28	3.2E-02	***8.7E+00***	0.72	1.6E+00	0.10	5.5E-03	1.0	0.28	2.7E-04
Copper	0.14	9.1E-01	1.0	0.28	6.3E-02	***6.8E+00***	0.72	1.2E+00	0.10	7.3E-03	1.0	0.28	3.7E-04
Lead	0.14	***2.3E-01***	1.0	0.28	1.6E-02	2.3E-04	0.72	4.1E-05	0.10	4.0E-03	1.0	0.28	2.0E-04
Manganese	0.14	9.9E+00	1.0	0.28	6.9E-01	1.6E+02	0.72	2.9E+01	0.10	1.1E-01	1.0	0.28	5.5E-03
Mercury	0.14	6.2E-02	1.0	0.28	4.3E-03	1.1E+00	0.72	2.1E-01	0.10	9.7E-05	1.0	0.28	4.9E-06
Nickel	0.14	***1.8E+00***	1.0	0.28	1.3E-01	***1.6E+00***	0.72	2.8E-01	0.10	1.4E-02	1.0	0.28	7.2E-04
Selenium	0.14	***4.6E-01***	1.0	0.28	3.2E-02	***6.5E-01***	0.72	1.2E-01	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Silver	0.14	***4.6E-01***	1.0	0.28	3.2E-02	***4.4E-01***	0.72	7.9E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Thallium	0.14	***4.6E-01***	1.0	0.28	3.2E-02	***5.0E+01***	0.72	9.0E+00	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Vanadium	0.14	***4.6E-01***	1.0	0.28	3.2E-02	8.5E+00	0.72	1.5E+00	0.10	5.7E-03	1.0	0.28	2.9E-04
Zinc	0.14	4.6E+01	1.0	0.28	3.2E+00	1.8E+01	0.72	3.2E+00	0.10	2.2E-02	1.0	0.28	1.1E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - The dietary percentage of the pond and river fish/water were calculated by dividing the length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond fish/water ingestion = (1,375+2,770)/14956 = 0.28.
(c) - See Table III-C1.
(d) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.
(e) - Metals were not analyzed for whole-body river fish tissue. Therefore, the surface water values were multiplied by their surface water-to-fish bioconcentration factors (BCFs) (USEPA, 1999). See Table III-B10.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected value
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-20
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Adjacent River 2002
Sauget, IL

Analyte	Concentration of Contaminant in River Surface Water (All near shore sample locations except Plots 1 and 6) (mg/L)	Dietary Percentage of River Surface Water (b)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (c)		Hazard Quotient	
							(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides										
4,4'-DDD	***5.0E-05***	0.72	6.5E-06	0.55	1.0	2.4E-03	1.1E+00	5.3E+00	2.2E-03	4.5E-04
4,4'-DDE	***5.0E-05***	0.72	6.5E-06	0.55	1.0	3.7E-03	1.1E+00	5.3E+00	3.4E-03	6.9E-04
4,4'-DDT	***5.0E-05***	0.72	6.5E-06	0.55	1.0	3.7E-03	1.1E+00	5.3E+00	3.4E-03	6.9E-04
Aldrin	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.4E-03	1.7E-01	8.6E-01	1.4E-02	2.8E-03
alpha-BHC	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.2E-03	1.4E-02	1.4E-01	1.6E-01	1.6E-02
alpha-Chlordane	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.3E-03	2.5E+00	5.1E+00	9.0E-04	4.5E-04
beta-BHC	2.4E-05	0.72	3.1E-06	0.55	1.0	2.4E-03	3.4E-01	1.7E+00	7.1E-03	1.4E-03
delta-BHC	***2.5E-05***	0.72	3.2E-06	0.55	1.0	3.9E-03	1.4E-02	1.4E-01	2.8E-01	2.8E-02
Dieldrin	***5.0E-05***	0.72	6.5E-06	0.55	1.0	1.2E-02	2.1E-02	2.1E-01	5.9E-01	5.9E-02
Endosulfan I	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.3E-03	9.5E-02	9.5E-01	2.4E-02	2.4E-03
Endosulfan II	***5.0E-05***	0.72	6.5E-06	0.55	1.0	2.6E-03	9.5E-02	9.5E-01	2.7E-02	2.7E-03
Endosulfan Sulfate	***5.0E-05***	0.72	6.5E-06	0.55	1.0	2.6E-03	9.5E-02	9.5E-01	2.7E-02	2.7E-03
Endrin	***5.0E-05***	0.72	6.5E-06	0.55	1.0	2.5E-03	8.2E-02	8.2E-01	3.1E-02	3.1E-03
Endrin Aldehyde	***5.0E-05***	0.72	6.5E-06	0.55	1.0	2.4E-03	8.2E-02	8.2E-01	3.0E-02	3.0E-03
Endrin Ketone	4.8E-05	0.72	6.2E-06	0.55	1.0	2.5E-03	8.2E-02	8.2E-01	3.1E-02	3.1E-03
gamma-BHC (Lindane)	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.4E-03	5.3E+00	5.3E+01	4.5E-04	4.5E-05
gamma-Chlordane	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.2E-03	2.5E+00	5.1E+00	8.5E-04	4.3E-04
Heptachlor	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.4E-03	1.0E-01	1.0E+00	2.4E-02	2.4E-03
Heptachlor Epoxide	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.1E-03	1.4E-03	1.0E-02	1.5E+00	2.1E-01
Methoxychlor	***2.5E-04***	0.72	3.2E-05	0.55	1.0	1.1E-02	5.1E+00	1.0E+01	2.1E-03	1.1E-03
Toxaphene	***2.5E-03***	0.72	3.2E-04	0.55	1.0	9.4E-02	8.0E+00	8.0E+01	1.2E-02	1.2E-03
Herbicides										
2,4-D	3.6E-03	0.72	4.6E-04	0.55	1.0	2.1E-03	8.1E-01	4.1E+00	2.6E-03	5.2E-04
2,4-DB	***2.5E-04***	0.72	3.2E-05	0.55	1.0	1.7E-03	1.3E+00	4.1E+00	1.3E-03	4.0E-04
2,4,5-T	2.5E-04	0.72	3.3E-05	0.55	1.0	1.9E-03	2.8E+00	9.4E+00	6.9E-04	2.1E-04
2,4,5-TP (Silvex)	***2.5E-04***	0.72	3.2E-05	0.55	1.0	1.8E-03	8.7E-01	2.9E+00	2.0E-03	6.1E-04
Dalapon	***6.0E-02***	0.72	7.8E-03	0.55	1.0	4.0E-01	7.9E+00	2.7E+01	5.0E-02	1.5E-02
Dicamba	***6.0E-04***	0.72	7.8E-05	0.55	1.0	4.0E-03	3.0E+00	1.0E+01	1.3E-03	4.0E-04
Dichlorprop	1.9E-03	0.72	2.5E-04	0.55	1.0	2.0E-02	1.6E-01	1.6E+00	1.2E-01	1.2E-02
Dinoseb	***5.0E-03***	0.72	6.5E-04	0.55	1.0	4.4E-02	9.4E-02	9.4E-01	4.7E-01	4.7E-02
MCPA	***6.0E-02***	0.72	7.8E-03	0.55	1.0	4.0E-01	1.7E-01	8.7E-01	2.3E+00	4.6E-01
MCPP	***6.0E-02***	0.72	7.8E-03	0.55	1.0	6.3E-01	2.8E-01	8.5E-01	2.2E+00	7.5E-01
PCBs										
Total PCBs	***2.5E-04***	0.72	3.2E-05	0.55	1.0	5.9E-01	9.4E-02	9.4E-01	6.3E+00	6.3E-01
Dioxins/Furans (d)										
TEQ	***1.7E-09***	0.72	2.2E-10	0.55	1.0	9.5E-07	9.4E-07	9.4E-06	1.0E+00	1.0E-01
Metals (e)										
Aluminum	7.9E-01	0.72	1.0E-01	0.55	1.0	1.7E+00	1.6E+00	1.6E+01	1.1E+00	1.1E-01
Antimony	***1.0E-02***	0.72	1.3E-03	0.55	1.0	1.4E-01	1.0E-01	1.0E+00	1.3E+00	1.3E-01
Arsenic	5.0E-03	0.72	6.5E-04	0.55	1.0	1.5E-01	8.1E-02	8.1E-01	1.9E+00	1.9E-01
Barium	6.2E-02	0.72	8.0E-03	0.55	1.0	7.4E+00	3.9E+00	1.5E+01	1.9E+00	4.9E-01
Beryllium	***2.0E-03***	0.72	2.6E-04	0.55	1.0	3.5E-02	6.2E-01	6.2E+00	5.7E-02	5.7E-03
Cadmium	***2.5E-03***	0.72	3.2E-04	0.55	1.0	4.2E-01	5.6E-01	5.6E+00	7.6E-01	7.6E-02
Chromium	***5.0E-03***	0.72	6.5E-04	0.55	1.0	4.1E-02	3.1E+00	1.2E+01	1.3E-02	3.3E-03
Cobalt	***5.0E-03***	0.72	6.5E-04	0.55	1.0	1.6E+00	4.7E-02	4.7E-01	3.4E+01	3.4E+00
Copper	***9.6E-03***	0.72	1.2E-03	0.55	1.0	1.3E+00	1.2E+01	1.5E+01	1.1E-01	8.4E-02
Lead	2.5E-03	0.72	3.3E-04	0.55	1.0	1.6E-02	7.5E+00	7.5E+01	2.2E-03	2.2E-04
Manganese	9.4E-02	0.72	1.2E-02	0.55	1.0	3.0E+01	8.3E+01	2.7E+02	3.6E-01	1.1E-01
Mercury	1.0E-04	0.72	1.3E-05	0.55	1.0	2.1E-01	1.5E-02	2.5E-02	1.4E+01	8.4E+00
Nickel	***2.0E-02***	0.72	2.6E-03	0.55	1.0	4.1E-01	3.8E+01	7.5E+01	1.1E-02	5.4E-03
Selenium	***5.0E-03***	0.72	6.5E-04	0.55	1.0	1.5E-01	2.0E-01	3.3E-01	7.3E-01	4.4E-01
Silver	***5.0E-03***	0.72	6.5E-04	0.55	1.0	1.1E-01	1.5E-01	1.5E+00	7.6E-01	7.6E-02
Thallium	***5.0E-03***	0.72	6.5E-04	0.55	1.0	9.0E+00	6.0E-03	6.0E-02	1.5E+03	1.5E+02
Vanadium	4.9E-03	0.72	6.3E-04	0.55	1.0	1.6E+00	2.6E-01	2.6E+00	6.0E+00	6.0E-01
Zinc	8.7E-03	0.72	1.1E-03	0.55	1.0	6.4E+00	1.4E+02	2.7E+02	4.7E-02	2.3E-02

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - The dietary percentage of the pond and river fish/water were calculated by dividing the length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond fish/water ingestion = (1,375+2,770)/14956 = 0.28.
(c) - See Table III-C1.
(d) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.
(e) - Metals were not analyzed for whole-body river fish tissue. Therefore, the surface water values were multiplied by their surface water-to-fish bioconcentration factors (BCFs) (USEPA, 1999). See Table III-B10.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected value
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-21
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Downstream River 2002
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Pond Fish (mg/kg)	Area Use Factor (a)	Dietary Percentage of Pond Fish (b)	Dose from Pond Fish (mg/kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Dietary Percentage of River Fish (b)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Surface Water (b)	Dose from Pond Surface Water (mg/kg/day)
SVOCs													
1,2,4-Trichlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
1,2-Dichlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
1,3-Dichlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
1,4-Dichlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,2'-Oxybis(1-Chloropropane)	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4,5-Trichlorophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4,6-Trichlorophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4-Dichlorophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4-Dimethylphenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4-Dinitrophenol	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
2,4-Dinitrotoluene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,6-Dinitrotoluene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Chloronaphthalene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Chlorophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Methylnaphthalene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Methylphenol (o-Cresol)	0.14	***5.0E-01***	1.0	0.28	3.5E-02	3.2E-01	0.72	5.7E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Nitroaniline	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
2-Nitrophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
3,3'-Dichlorobenzidine	0.14	***1.0E+00***	1.0	0.28	7.0E-02	***1.0E+00***	0.72	1.8E-01	0.10	***1.0E-02***	1.0	0.28	5.0E-04
3/4-Methylphenol (m&p-Cresol)	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
3-Nitroaniline	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
4,6-Dinitro-2-methylphenol	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
4-Bromophenyl Phenyl Ether	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
4-Chloro-3-methylphenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
4-Chloroaniline	0.14	***1.0E+00***	1.0	0.28	7.0E-02	***5.0E-01***	0.72	8.9E-02	0.10	***1.0E-02***	1.0	0.28	5.0E-04
4-Chlorophenyl Phenyl Ether	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
4-Nitroaniline	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
4-Nitrophenol	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
Acenaphthene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Acenaphthylene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Anthracene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Benzo(a)anthracene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Benzo(a)pyrene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.6E-03	1.0	0.28	2.3E-04
Benzo(b)fluoranthene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Benzo(g,h,i)perylene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.6E-03	1.0	0.28	2.3E-04
Benzo(k)fluoranthene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	5.2E-03	1.0	0.28	2.6E-04
bis(2-Chloroethoxy)methane	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
bis(2-Chloroethyl)ether	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
bis(2-Ethylhexyl)phthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Butyl Benzyl Phthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Carbazole	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Chrysene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Dibenzo(a,h)anthracene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Dibenzofuran	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Diethyl Phthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Dimethyl Phthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Di-n-butylphthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.6E-03	1.0	0.28	2.3E-04
Di-n-octylphthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Fluoranthene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Fluorene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Hexachlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Hexachlorobutadiene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Hexachlorocyclopentadiene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Hexachloroethane	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Indeno(1,2,3-cd)pyrene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.8E-03	1.0	0.28	2.4E-04
Isophorone	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Naphthalene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.9E-03	1.0	0.28	2.5E-04
Nitrobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
N-Nitroso-di-n-propylamine	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
N-Nitrosodiphenylamine	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Pentachlorophenol	0.14	***2.6E-02***	1.0	0.28	1.8E-03	***1.3E+00***	0.72	2.2E-01	0.10	***5.0E-04***	1.0	0.28	2.5E-05
Phenanthrene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Phenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Pyrene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - The dietary percentage of the pond and river fish/water were calculated by dividing the length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond fish/water ingestion = (1,375+2,770)/14956 = 0.28.
(c) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-21
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Downstream River 2002
Sauget, IL

Analyte	Concentration of Contaminant in River Surface Water (Plot 6 A-Line) (mg/L)	Dietary Percentage of River Surface Water (b)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (c)		Hazard Quotient	
SVOCs							(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.4E+01	5.0E+01	5.8E-03	1.6E-03
1,2-Dichlorobenzene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.0E+01	1.1E+03	1.0E-03	7.2E-05
1,3-Dichlorobenzene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.0E+01	1.1E+03	1.0E-03	7.2E-05
1,4-Dichlorobenzene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.0E+01	1.4E+02	1.0E-03	5.8E-04
2,2'-Oxybis(1-Chloropropane)	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.9E+01	1.6E+02	2.8E-03	5.1E-04
2,4,5-Trichlorophenol	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	9.4E+00	2.8E+01	8.6E-03	2.9E-03
2,4,6-Trichlorophenol	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	4.7E+02	2.8E+01	1.7E-04	2.9E-03
2,4-Dichlorophenol	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.8E-01	2.8E+00	2.9E-01	2.9E-02
2,4-Dimethylphenol	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	4.1E+00	2.0E+01	2.0E-02	4.0E-03
2,4-Dinitrophenol	***2.5E-02***	0.72	3.2E-03	0.55	1.0	4.1E-01	1.3E-03	1.3E-02	3.2E+02	3.2E+01
2,4-Dinitrotoluene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.3E-01	1.7E+00	3.5E-01	4.6E-02
2,6-Dinitrotoluene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	6.6E-01	6.6E+00	1.2E-01	1.2E-02
2-Chloronaphthalene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.0E+01	4.9E+01	4.0E-03	1.7E-03
2-Chlorophenol	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	4.7E+01	4.7E+00	1.7E-03	1.7E-02
2-Methylnaphthalene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.3E+03	2.3E+04	3.5E-05	3.5E-06
2-Methylphenol (o-Cresol)	***5.0E-03***	0.72	6.5E-04	0.55	1.0	9.2E-02	2.2E+02	2.2E+03	4.2E-04	4.2E-05
2-Nitroaniline	***2.5E-02***	0.72	3.2E-03	0.55	1.0	4.1E-01	3.9E+00	3.9E+01	1.0E-01	1.0E-02
2-Nitrophenol	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.3E+00	6.6E+00	3.5E-02	1.2E-02
3,3'-Dichlorobenzidine	***1.0E-02***	0.72	1.3E-03	0.55	1.0	2.5E-01	1.2E+01	4.1E+02	2.1E-02	6.1E-04
3/4-Methylphenol (m&p-Cresol)	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.2E+02	2.2E+03	3.7E-04	3.7E-05
3-Nitroaniline	***2.5E-02***	0.72	3.2E-03	0.55	1.0	4.1E-01	3.9E+00	3.9E+01	1.0E-01	1.0E-02
4,6-Dinitro-2-methylphenol	***2.5E-02***	0.72	3.2E-03	0.55	1.0	4.1E-01	2.3E-01	4.3E+00	1.7E+00	9.5E-02
4-Bromophenyl Phenyl Ether	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	9.4E-01	7.5E+00	8.6E-02	1.1E-02
4-Chloro-3-methylphenol	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.1E+02	1.1E+03	7.7E-04	7.7E-05
4-Chloroaniline	***1.0E-02***	0.72	1.3E-03	0.55	1.0	1.6E-01	1.2E+00	1.2E+01	1.4E-01	1.4E-02
4-Chlorophenyl Phenyl Ether	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	9.4E-01	7.5E+00	8.6E-02	1.1E-02
4-Nitroaniline	***2.5E-02***	0.72	3.2E-03	0.55	1.0	4.1E-01	3.9E+00	3.9E+01	1.0E-01	1.0E-02
4-Nitrophenol	***2.5E-02***	0.72	3.2E-03	0.55	1.0	4.1E-01	2.3E+00	6.6E+00	1.7E-01	6.2E-02
Acenaphthene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.4E+01	2.8E+01	5.7E-03	2.9E-03
Acenaphthylene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.4E+01	2.8E+01	5.7E-03	2.9E-03
Anthracene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E+01	8.1E+02	1.0E-03	1.0E-04
Benzo(a)anthracene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Benzo(a)pyrene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Benzo(b)fluoranthene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Benzo(g,h,i)perylene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Benzo(k)fluoranthene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
bis(2-Chloroethoxy)methane	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.9E+01	1.6E+02	2.8E-03	5.1E-04
bis(2-Chloroethyl)ether	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.9E+01	1.6E+02	2.8E-03	5.1E-04
bis(2-Ethylhexyl)phthalate	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.2E+02	1.2E+03	6.9E-04	6.9E-05
Butyl Benzyl Phthalate	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.5E+01	4.4E+01	5.4E-03	1.8E-03
Carbazole	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	2.4E+00	2.4E+01	3.3E-02	3.3E-03
Chrysene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Dibenzo(a,h)anthracene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Dibenzofuran	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.2E-02	1.2E-01	6.6E+00	6.6E-01
Diethyl Phthalate	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.7E+03	1.7E+04	4.8E-05	4.8E-06
Dimethyl Phthalate	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	3.7E+03	3.7E+04	2.2E-05	2.2E-06
Di-n-butylphthalate	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.8E+03	6.1E+03	4.4E-05	1.3E-05
Di-n-octylphthalate	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	4.5E+02	1.5E+03	1.8E-04	5.5E-05
Fluoranthene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.0E+01	2.0E+01	8.0E-03	4.0E-03
Fluorene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.0E+01	2.0E+01	8.0E-03	4.0E-03
Hexachlorobenzene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	7.5E-02	2.7E-01	1.1E+00	3.0E-01
Hexachlorobutadiene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.9E-01	1.9E-01	4.3E-01	4.3E-01
Hexachlorocyclopentadiene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	5.6E-01	1.0E+00	1.4E-01	7.9E-02
Hexachloroethane	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	9.4E-02	1.4E+00	8.6E-01	5.8E-02
Indeno(1,2,3-cd)pyrene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Isophorone	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.7E+01	1.7E+02	4.6E-03	4.8E-04
Naphthalene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	6.7E+00	1.3E+01	1.2E-02	6.1E-03
Nitrobenzene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	3.7E-02	3.7E-01	2.2E+00	2.2E-01
N-Nitroso-di-n-propylamine	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	8.1E-03	8.1E-02	1.0E+01	1.0E+00
N-Nitrosodiphenylamine	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.9E+02	4.7E+01	4.3E-04	1.7E-03
Pentachlorophenol	***5.0E-04***	0.72	6.5E-05	0.55	1.0	2.3E-01	2.0E-01	2.0E+00	1.1E+00	1.1E-01
Phenanthrene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	1.4E+01	2.8E+01	5.7E-03	2.9E-03
Phenol	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	5.6E+01	1.1E+02	1.4E-03	7.2E-04
Pyrene	***5.0E-03***	0.72	6.5E-04	0.55	1.0	8.1E-02	6.1E+00	1.0E+01	1.3E-02	8.0E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - The dietary percentage of the pond and river fish/water were calculated by dividing the length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond fish/water ingestion = (1,375+2,770)/14956 = 0.28.
(c) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-21
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Downstream River 2002
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Pond Fish (mg/kg)	Area Use Factor (a)	Dietary Percentage of Pond Fish (b)	Dose from Pond Fish (mg/kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Dietary Percentage of River Fish (b)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Surface Water (b)	Dose from Pond Surface Water (mg/kg/day)
Pesticides													
4,4'-DDD	0.14	***5.0E-03***	1.0	0.28	3.5E-04	1.7E-02	0.72	3.0E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
4,4'-DDE	0.14	***5.0E-03***	1.0	0.28	3.5E-04	1.3E-02	0.72	2.4E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
4,4'-DDT	0.14	***2.0E-02***	1.0	0.28	1.4E-03	***1.7E-02***	0.72	3.0E-03	0.10	4.8E-05	1.0	0.28	2.4E-06
Aldrin	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.7E-02***	0.72	3.0E-03	0.10	2.3E-05	1.0	0.28	1.2E-06
alpha-BHC	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.7E-02***	0.72	3.0E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
alpha-Chlordane	0.14	***2.6E-03***	1.0	0.28	1.8E-04	1.1E-02	0.72	2.0E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
beta-BHC	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.7E-02***	0.72	3.0E-03	0.10	2.3E-05	1.0	0.28	1.2E-06
delta-BHC	0.14	2.4E-02	1.0	0.28	1.7E-03	***1.7E-02***	0.72	3.0E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Dieldrin	0.14	1.4E-01	1.0	0.28	9.8E-03	1.4E-02	0.72	2.5E-03	0.10	4.1E-05	1.0	0.28	2.0E-06
Endosulfan I	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.7E-02***	0.72	3.0E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Endosulfan II	0.14	***5.0E-03***	1.0	0.28	3.5E-04	***1.7E-02***	0.72	3.0E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
Endosulfan Sulfate	0.14	***5.0E-03***	1.0	0.28	3.5E-04	1.7E-02	0.72	3.0E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
Endrin	0.14	***5.0E-03***	1.0	0.28	3.5E-04	***1.7E-02***	0.72	3.0E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
Endrin Aldehyde	0.14	***5.0E-03***	1.0	0.28	3.5E-04	1.4E-02	0.72	2.5E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
Endrin Ketone	0.14	3.6E-03	1.0	0.28	2.5E-04	***1.7E-02***	0.72	3.0E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
gamma-BHC (Lindane)	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.7E-02***	0.72	3.0E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
gamma-Chlordane	0.14	***2.6E-03***	1.0	0.28	1.8E-04	1.4E-02	0.72	2.5E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Heptachlor	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.7E-02***	0.72	3.0E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Heptachlor Epoxide	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.7E-02***	0.72	3.0E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Methoxychlor	0.14	***2.6E-02***	1.0	0.28	1.8E-03	***6.7E-02***	0.72	1.2E-02	0.10	***2.5E-04***	1.0	0.28	1.3E-05
Toxaphene	0.14	***2.6E-01***	1.0	0.28	1.8E-02	***5.7E-01***	0.72	1.0E-01	0.10	***2.5E-03***	1.0	0.28	1.3E-04
Herbicides													
2,4-D	0.14	***1.3E-02***	1.0	0.28	8.7E-04	***4.2E-03***	0.72	7.4E-04	0.10	***2.5E-04***	1.0	0.28	1.3E-05
2,4-DB	0.14	***1.3E-02***	1.0	0.28	8.7E-04	***4.2E-03***	0.72	7.4E-04	0.10	***2.5E-04***	1.0	0.28	1.3E-05
2,4,5-T	0.14	***1.3E-02***	1.0	0.28	8.7E-04	***4.2E-03***	0.72	7.4E-04	0.10	***2.5E-04***	1.0	0.28	1.3E-05
2,4,5-TP (Silvex)	0.14	***1.3E-02***	1.0	0.28	8.7E-04	5.0E-03	0.72	8.9E-04	0.10	***2.5E-04***	1.0	0.28	1.3E-05
Dalapon	0.14	***3.0E+00***	1.0	0.28	2.1E-01	***1.0E+00***	0.72	1.8E-01	0.10	***6.0E-02***	1.0	0.28	3.0E-03
Dicamba	0.14	***3.0E-02***	1.0	0.28	2.1E-03	***1.0E-02***	0.72	1.8E-03	0.10	***6.0E-04***	1.0	0.28	3.0E-05
Dichlorprop	0.14	***1.5E-01***	1.0	0.28	1.0E-02	***5.0E-02***	0.72	9.0E-03	0.10	***3.0E-03***	1.0	0.28	1.5E-04
Dinoseb	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***5.0E-02***	0.72	9.0E-03	0.10	***5.0E-03***	1.0	0.28	2.5E-04
MCPA	0.14	***3.0E+00***	1.0	0.28	2.1E-01	***1.0E+00***	0.72	1.8E-01	0.10	***6.0E-02***	1.0	0.28	3.0E-03
MCPP	0.14	***3.0E+00***	1.0	0.28	2.1E-01	***1.0E+00***	0.72	1.8E-01	0.10	***6.0E-02***	1.0	0.28	3.0E-03
PCBs													
Total PCBs	0.14	8.4E+00	1.0	0.28	5.9E-01	***2.5E-02***	0.72	4.5E-03	0.10	2.3E-04	1.0	0.28	1.1E-05
Dioxins/Furans (d)													
TEQ	0.14	9.9E-06	1.0	0.28	6.9E-07	1.5E-06	0.72	2.7E-07	0.10	8.1E-09	1.0	0.28	4.1E-10
Metals (e)													
Aluminum	0.14	1.6E+01	1.0	0.28	1.1E+00	2.2E+00	0.72	3.9E-01	0.10	1.1E+00	1.0	0.28	5.4E-02
Antimony	0.14	***9.0E-01***	1.0	0.28	6.3E-02	3.5E-01	0.72	6.3E-02	0.10	***8.3E-03***	1.0	0.28	4.2E-04
Arsenic	0.14	7.3E-01	1.0	0.28	5.1E-02	5.8E-01	0.72	1.0E-01	0.10	5.1E-03	1.0	0.28	2.5E-04
Barium	0.14	5.3E+00	1.0	0.28	3.7E-01	3.8E+01	0.72	6.9E+00	0.10	1.4E-01	1.0	0.28	7.1E-03
Beryllium	0.14	***1.8E-01***	1.0	0.28	1.3E-02	***1.2E-01***	0.72	2.2E-02	0.10	***2.0E-03***	1.0	0.28	1.0E-04
Cadmium	0.14	***2.3E-01***	1.0	0.28	1.6E-02	***2.3E+00***	0.72	4.1E-01	0.10	2.3E-03	1.0	0.28	1.1E-04
Chromium	0.14	3.3E-01	1.0	0.28	2.3E-02	***9.5E-02***	0.72	1.7E-02	0.10	5.1E-03	1.0	0.28	2.6E-04
Cobalt	0.14	***4.6E-01***	1.0	0.28	3.2E-02	5.2E+00	0.72	9.3E-01	0.10	5.5E-03	1.0	0.28	2.7E-04
Copper	0.14	9.1E-01	1.0	0.28	6.3E-02	5.8E+00	0.72	1.0E+00	0.10	7.3E-03	1.0	0.28	3.7E-04
Lead	0.14	***2.3E-01***	1.0	0.28	1.6E-02	***2.3E-04***	0.72	4.0E-05	0.10	4.0E-03	1.0	0.28	2.0E-04
Manganese	0.14	9.9E+00	1.0	0.28	6.9E-01	1.5E+02	0.72	2.7E+01	0.10	1.1E-01	1.0	0.28	5.5E-03
Mercury	0.14	6.2E-02	1.0	0.28	4.3E-03	***1.1E+00***	0.72	2.0E-01	0.10	9.7E-05	1.0	0.28	4.9E-06
Nickel	0.14	***1.8E+00***	1.0	0.28	1.3E-01	***1.6E+00***	0.72	2.8E-01	0.10	1.4E-02	1.0	0.28	7.2E-04
Selenium	0.14	***4.6E-01***	1.0	0.28	3.2E-02	***6.5E-01***	0.72	1.2E-01	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Silver	0.14	***4.6E-01***	1.0	0.28	3.2E-02	***4.4E-01***	0.72	7.9E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Thallium	0.14	***4.6E-01***	1.0	0.28	3.2E-02	***5.0E+01***	0.72	9.0E+00	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Vanadium	0.14	***4.6E-01***	1.0	0.28	3.2E-02	8.3E+00	0.72	1.5E+00	0.10	5.7E-03	1.0	0.28	2.9E-04
Zinc	0.14	4.6E+01	1.0	0.28	3.2E+00	1.1E+01	0.72	2.0E+00	0.10	2.2E-02	1.0	0.28	1.1E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - The dietary percentage of the pond and river fish/water were calculated by dividing the length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond fish/water ingestion = (1,375+2,770)/14956 = 0.28.
(c) - See Table III-C1.
(d) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.
(e) - Metals were not analyzed for whole-body river fish tissue. Therefore, the surface water values were multiplied by their surface water-to-fish bioconcentration factors (BCFs) (USEPA, 1999). See Table III-B10.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected value
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-21
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Downstream River 2002
Sauget, IL

Analyte	Concentration of Contaminant in River Surface Water (Plot 6 A-Line) (mg/L)	Dietary Percentage of River Surface Water (b)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (c)		Hazard Quotient	
							(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides										
4,4'-DDD	***5.0E-05***	0.72	6.5E-06	0.55	1.0	3.3E-03	1.1E+00	5.3E+00	3.1E-03	6.3E-04
4,4'-DDE	***5.0E-05***	0.72	6.5E-06	0.55	1.0	2.8E-03	1.1E+00	5.3E+00	2.6E-03	5.2E-04
4,4'-DDT	***5.0E-05***	0.72	6.5E-06	0.55	1.0	4.4E-03	1.1E+00	5.3E+00	4.1E-03	8.3E-04
Aldrin	***2.5E-05***	0.72	3.2E-06	0.55	1.0	3.2E-03	1.7E-01	8.6E-01	1.8E-02	3.7E-03
alpha-BHC	***2.5E-05***	0.72	3.2E-06	0.55	1.0	3.2E-03	1.4E-02	1.4E-01	2.3E-01	2.3E-02
alpha-Chlordane	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.1E-03	2.5E+00	5.1E+00	8.5E-04	4.2E-04
beta-BHC	***2.5E-05***	0.72	3.2E-06	0.55	1.0	3.2E-03	3.4E-01	1.7E+00	9.2E-03	1.8E-03
delta-BHC	***2.5E-05***	0.72	3.2E-06	0.55	1.0	4.7E-03	1.4E-02	1.4E-01	3.3E-01	3.3E-02
Dieldrin	***5.0E-05***	0.72	6.5E-06	0.55	1.0	1.2E-02	2.1E-02	2.1E-01	5.8E-01	5.8E-02
Endosulfan I	***2.5E-05***	0.72	3.2E-06	0.55	1.0	3.2E-03	9.5E-02	9.5E-01	3.3E-02	3.3E-03
Endosulfan II	***5.0E-05***	0.72	6.5E-06	0.55	1.0	3.3E-03	9.5E-02	9.5E-01	3.5E-02	3.5E-03
Endosulfan Sulfate	***5.0E-05***	0.72	6.5E-06	0.55	1.0	3.3E-03	9.5E-02	9.5E-01	3.5E-02	3.5E-03
Endrin	***5.0E-05***	0.72	6.5E-06	0.55	1.0	3.3E-03	8.2E-02	8.2E-01	4.1E-02	4.1E-03
Endrin Aldehyde	***5.0E-05***	0.72	6.5E-06	0.55	1.0	2.9E-03	8.2E-02	8.2E-01	3.5E-02	3.5E-03
Endrin Ketone	***5.0E-05***	0.72	6.5E-06	0.55	1.0	3.2E-03	8.2E-02	8.2E-01	4.0E-02	4.0E-03
gamma-BHC (Lindane)	***2.5E-05***	0.72	3.2E-06	0.55	1.0	3.2E-03	5.3E+00	5.3E+01	5.9E-04	5.9E-05
gamma-Chlordane	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.6E-03	2.5E+00	5.1E+00	1.0E-03	5.2E-04
Heptachlor	***2.5E-05***	0.72	3.2E-06	0.55	1.0	3.2E-03	1.0E-01	1.0E+00	3.2E-02	3.2E-03
Heptachlor Epoxide	***2.5E-05***	0.72	3.2E-06	0.55	1.0	3.2E-03	1.4E-03	1.0E-02	2.3E+00	3.2E-01
Methoxychlor	***2.5E-04***	0.72	3.2E-05	0.55	1.0	1.4E-02	5.1E+00	1.0E+01	2.7E-03	1.4E-03
Toxaphene	***2.5E-03***	0.72	3.2E-04	0.55	1.0	1.2E-01	8.0E+00	8.0E+01	1.5E-02	1.5E-03
Herbicides										
2,4-D	9.0E-04	0.72	1.2E-04	0.55	1.0	1.7E-03	8.1E-01	4.1E+00	2.2E-03	4.3E-04
2,4-DB	***2.5E-04***	0.72	3.2E-05	0.55	1.0	1.7E-03	1.3E+00	4.1E+00	1.3E-03	4.0E-04
2,4,5-T	***2.5E-04***	0.72	3.2E-05	0.55	1.0	1.7E-03	2.8E+00	9.4E+00	5.9E-04	1.8E-04
2,4,5-TP (Silvex)	***2.5E-04***	0.72	3.2E-05	0.55	1.0	1.8E-03	8.7E-01	2.9E+00	2.1E-03	6.2E-04
Dalapon	***6.0E-02***	0.72	7.8E-03	0.55	1.0	4.0E-01	7.9E+00	2.7E+01	5.0E-02	1.5E-02
Dicamba	***6.0E-04***	0.72	7.8E-05	0.55	1.0	4.0E-03	3.0E+00	1.0E+01	1.3E-03	4.0E-04
Dichlorprop	***3.0E-03***	0.72	3.9E-04	0.55	1.0	2.0E-02	1.6E-01	1.6E+00	1.2E-01	1.2E-02
Dinoseb	***5.0E-03***	0.72	6.5E-04	0.55	1.0	4.4E-02	9.4E-02	9.4E-01	4.7E-01	4.7E-02
MCPA	***6.0E-02***	0.72	7.8E-03	0.55	1.0	4.0E-01	1.7E-01	8.7E-01	2.3E+00	4.6E-01
MCPP	***6.0E-02***	0.72	7.8E-03	0.55	1.0	4.0E-01	2.8E-01	8.5E-01	1.4E+00	4.7E-01
PCBs										
Total PCBs	***2.5E-04***	0.72	3.2E-05	0.55	1.0	5.9E-01	9.4E-02	9.4E-01	6.3E+00	6.3E-01
Dioxins/Furans (d)										
TEQ	***2.0E-09***	0.72	2.6E-10	0.55	1.0	9.5E-07	9.4E-07	9.4E-06	1.0E+00	1.0E-01
Metals (e)										
Aluminum	8.1E-01	0.72	1.1E-01	0.55	1.0	1.7E+00	1.6E+00	1.6E+01	1.1E+00	1.1E-01
Antimony	8.8E-03	0.72	1.1E-03	0.55	1.0	1.3E-01	1.0E-01	1.0E+00	1.3E+00	1.3E-01
Arsenic	5.1E-03	0.72	6.6E-04	0.55	1.0	1.6E-01	8.1E-02	8.1E-01	1.9E+00	1.9E-01
Barium	6.1E-02	0.72	7.9E-03	0.55	1.0	7.3E+00	3.9E+00	1.5E+01	1.9E+00	4.8E-01
Beryllium	***2.0E-03***	0.72	2.6E-04	0.55	1.0	3.5E-02	6.2E-01	6.2E+00	5.7E-02	5.7E-03
Cadmium	***2.5E-03***	0.72	3.2E-04	0.55	1.0	4.2E-01	5.6E-01	5.6E+00	7.6E-01	7.6E-02
Chromium	***5.0E-03***	0.72	6.5E-04	0.55	1.0	4.1E-02	3.1E+00	1.2E+01	1.3E-02	3.3E-03
Cobalt	3.0E-03	0.72	3.9E-04	0.55	1.0	9.6E-01	4.7E-02	4.7E-01	2.0E+01	2.0E+00
Copper	8.1E-03	0.72	1.1E-03	0.55	1.0	1.1E+00	1.2E+01	1.5E+01	9.4E-02	7.1E-02
Lead	***2.5E-03***	0.72	3.2E-04	0.55	1.0	1.6E-02	7.5E+00	7.5E+01	2.2E-03	2.2E-04
Manganese	8.6E-02	0.72	1.1E-02	0.55	1.0	2.7E+01	8.3E+01	2.7E+02	3.3E-01	1.0E-01
Mercury	***1.0E-04***	0.72	1.3E-05	0.55	1.0	2.0E-01	1.5E-02	2.5E-02	1.4E+01	8.2E+00
Nickel	***2.0E-02***	0.72	2.6E-03	0.55	1.0	4.1E-01	3.8E+01	7.5E+01	1.1E-02	5.4E-03
Selenium	***5.0E-03***	0.72	6.5E-04	0.55	1.0	1.5E-01	2.0E-01	3.3E-01	7.3E-01	4.4E-01
Silver	***5.0E-03***	0.72	6.5E-04	0.55	1.0	1.1E-01	1.5E-01	1.5E+00	7.6E-01	7.6E-02
Thallium	***5.0E-03***	0.72	6.5E-04	0.55	1.0	9.0E+00	6.0E-03	6.0E-02	1.5E+03	1.5E+02
Vanadium	4.8E-03	0.72	6.2E-04	0.55	1.0	1.5E+00	2.6E-01	2.6E+00	5.9E+00	5.9E-01
Zinc	5.5E-03	0.72	7.1E-04	0.55	1.0	5.2E+00	1.4E+02	2.7E+02	3.8E-02	1.9E-02

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - The dietary percentage of the pond and river fish/water were calculated by dividing the length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond fish/water ingestion = (1,375+2,770)/14956 = 0.28.
(c) - See Table III-C1.
(d) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.
(e) - Metals were not analyzed for whole-body river fish tissue. Therefore, the surface water values were multiplied by their surface water-to-fish bioconcentration factors (BCFs) (USEPA, 1999). See Table III-B10.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected value
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-22
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Adjacent River 2007
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Pond Fish (mg/kg)	Area Use Factor (a)	Dietary Percentage of Pond Fish (b)	Dose from Pond Fish (mg/kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Dietary Percentage of River Fish (b)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Surface Water (b)	Dose from Pond Surface Water (mg/kg/day)
SVOCs													
1,2,4-Trichlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
1,2-Dichlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	2.3E-01	0.72	4.1E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
1,3-Dichlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
1,4-Dichlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	2.4E-01	0.72	4.3E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,2'-Oxybis(1-Chloropropane)	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4,5-Trichlorophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4,6-Trichlorophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4-Dichlorophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	2.3E-01	0.72	4.1E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4-Dimethylphenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,4-Dinitrophenol	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
2,4-Dinitrotoluene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2,6-Dinitrotoluene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Chloronaphthalene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Chlorophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Methylnaphthalene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Methylphenol (o-Cresol)	0.14	***5.0E-01***	1.0	0.28	3.5E-02	2.2E-01	0.72	4.0E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
2-Nitroaniline	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
2-Nitrophenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
3,3'-Dichlorobenzidine	0.14	***1.0E+00***	1.0	0.28	7.0E-02	***1.0E+00***	0.72	1.8E-01	0.10	***1.0E-02***	1.0	0.28	5.0E-04
3/4-Methylphenol (m&p-Cresol)	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
3-Nitroaniline	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
4,6-Dinitro-2-methylphenol	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
4-Bromophenyl Phenyl Ether	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
4-Chloro-3-methylphenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
4-Chloroaniline	0.14	***1.0E+00***	1.0	0.28	7.0E-02	***5.0E-01***	0.72	8.9E-02	0.10	***1.0E-02***	1.0	0.28	5.0E-04
4-Chlorophenyl Phenyl Ether	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
4-Nitroaniline	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
4-Nitrophenol	0.14	***2.6E+00***	1.0	0.28	1.8E-01	***1.3E+00***	0.72	2.2E-01	0.10	***2.5E-02***	1.0	0.28	1.3E-03
Acenaphthene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Acenaphthylene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Anthracene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Benzo(a)anthracene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Benzo(a)pyrene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.6E-03	1.0	0.28	2.3E-04
Benzo(b)fluoranthene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Benzo(g,h,i)perylene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.6E-03	1.0	0.28	2.3E-04
Benzo(k)fluoranthene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	5.2E-03	1.0	0.28	2.6E-04
bis(2-Chloroethoxy)methane	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
bis(2-Chloroethyl)ether	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
bis(2-Ethylhexyl)phthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Butyl Benzyl Phthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Carbazole	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Chrysene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Dibenzo(a,h)anthracene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Dibenzofuran	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Diethyl Phthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Dimethyl Phthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Di-n-butylphthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.6E-03	1.0	0.28	2.3E-04
Di-n-octylphthalate	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Fluoranthene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Fluorene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Hexachlorobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Hexachlorobutadiene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Hexachlorocyclopentadiene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Hexachloroethane	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Indeno(1,2,3-cd)pyrene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.8E-03	1.0	0.28	2.4E-04
Isophorone	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Naphthalene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	4.9E-03	1.0	0.28	2.5E-04
Nitrobenzene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
N-Nitroso-di-n-propylamine	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
N-Nitrosodiphenylamine	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Pentachlorophenol	0.14	***2.6E-02***	1.0	0.28	1.8E-03	***1.3E+00***	0.72	2.2E-01	0.10	***5.0E-04***	1.0	0.28	2.5E-05
Phenanthrene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Phenol	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Pyrene	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***2.6E-01***	0.72	4.6E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - The dietary percentage of the pond and river fish/water were calculated by dividing the length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond fish/water ingestion = (1,375+2,770)/14956 = 0.28.
(c) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-22
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Adjacent River 2007
Sauget, IL

Analyte	Concentration of Contaminant in River Surface Water (All near shore sample locations except Plots 1 and 6) (mg/L)	Dietary Percentage of River Surface Water (b)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (c)		Hazard Quotient	
SVOCs							(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.4E+01	5.0E+01	5.8E-03	1.6E-03
1,2-Dichlorobenzene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	7.6E-02	8.0E+01	1.1E+03	9.5E-04	6.8E-05
1,3-Dichlorobenzene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	8.0E+01	1.1E+03	1.0E-03	7.2E-05
1,4-Dichlorobenzene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	7.9E-02	8.0E+01	1.4E+02	9.8E-04	5.6E-04
2,2'-Oxybis(1-Chloropropane)	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	2.9E+01	1.6E+02	2.8E-03	5.1E-04
2,4,5-Trichlorophenol	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	9.4E+00	2.8E+01	8.6E-03	2.9E-03
2,4,6-Trichlorophenol	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	4.7E+02	2.8E+01	1.7E-04	2.9E-03
2,4-Dichlorophenol	***4.8E-03***	0.72	6.3E-04	0.55	1.0	7.6E-02	2.8E-01	2.8E+00	2.7E-01	2.7E-02
2,4-Dimethylphenol	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	4.1E+00	2.0E+01	2.0E-02	4.0E-03
2,4-Dinitrophenol	***2.4E-02***	0.72	3.1E-03	0.55	1.0	4.1E-01	1.3E-03	1.3E-02	3.2E+02	3.2E+01
2,4-Dinitrotoluene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	2.3E-01	1.7E+00	3.5E-01	4.6E-02
2,6-Dinitrotoluene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	6.6E-01	6.6E+00	1.2E-01	1.2E-02
2-Chloronaphthalene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	2.0E+01	4.9E+01	4.0E-03	1.7E-03
2-Chlorophenol	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	4.7E+01	4.7E+00	1.7E-03	1.7E-02
2-Methylnaphthalene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	2.3E+03	2.3E+04	3.5E-05	3.5E-06
2-Methylphenol (o-Cresol)	***4.8E-03***	0.72	6.3E-04	0.55	1.0	7.5E-02	2.2E+02	2.2E+03	3.4E-04	3.4E-05
2-Nitroaniline	***2.4E-02***	0.72	3.1E-03	0.55	1.0	4.1E-01	3.9E+00	3.9E+01	1.0E-01	1.0E-02
2-Nitrophenol	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	2.3E+00	6.6E+00	3.5E-02	1.2E-02
3,3'-Dichlorobenzidine	***9.5E-03***	0.72	1.2E-03	0.55	1.0	2.5E-01	1.2E+01	4.1E+02	2.1E-02	6.1E-04
3/4-Methylphenol (m&p-Cresol)	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	2.2E+02	2.2E+03	3.7E-04	3.7E-05
3-Nitroaniline	***2.4E-02***	0.72	3.1E-03	0.55	1.0	4.1E-01	3.9E+00	3.9E+01	1.0E-01	1.0E-02
4,6-Dinitro-2-methylphenol	***2.4E-02***	0.72	3.1E-03	0.55	1.0	4.1E-01	2.3E-01	4.3E+00	1.7E+00	9.5E-02
4-Bromophenyl Phenyl Ether	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	9.4E-01	7.5E+00	8.6E-02	1.1E-02
4-Chloro-3-methylphenol	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.1E+02	1.1E+03	7.7E-04	7.7E-05
4-Chloroaniline	***9.5E-03***	0.72	1.2E-03	0.55	1.0	1.6E-01	1.2E+00	1.2E+01	1.4E-01	1.4E-02
4-Chlorophenyl Phenyl Ether	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	9.4E-01	7.5E+00	8.6E-02	1.1E-02
4-Nitroaniline	***2.4E-02***	0.72	3.1E-03	0.55	1.0	4.1E-01	3.9E+00	3.9E+01	1.0E-01	1.0E-02
4-Nitrophenol	***2.4E-02***	0.72	3.1E-03	0.55	1.0	4.1E-01	2.3E+00	6.6E+00	1.7E-01	6.2E-02
Acenaphthene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.4E+01	2.8E+01	5.7E-03	2.9E-03
Acenaphthylene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.4E+01	2.8E+01	5.7E-03	2.9E-03
Anthracene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	8.1E+01	8.1E+02	1.0E-03	1.0E-04
Benzo(a)anthracene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Benzo(a)pyrene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Benzo(b)fluoranthene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Benzo(g,h,i)perylene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Benzo(k)fluoranthene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
bis(2-Chloroethoxy)methane	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	2.9E+01	1.6E+02	2.8E-03	5.1E-04
bis(2-Chloroethyl)ether	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	2.9E+01	1.6E+02	2.8E-03	5.1E-04
bis(2-Ethylhexyl)phthalate	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.2E+02	1.2E+03	6.9E-04	6.9E-05
Butyl Benzyl Phthalate	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.5E+01	4.4E+01	5.4E-03	1.8E-03
Carbazole	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	2.4E+00	2.4E+01	3.3E-02	3.3E-03
Chrysene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Dibenzo(a,h)anthracene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Dibenzofuran	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.2E-02	1.2E-01	6.6E+00	6.6E-01
Diethyl Phthalate	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.7E+03	1.7E+04	4.8E-05	4.8E-06
Dimethyl Phthalate	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	3.7E+03	3.7E+04	2.2E-05	2.2E-06
Di-n-butylphthalate	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.8E+03	6.1E+03	4.4E-05	1.3E-05
Di-n-octylphthalate	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	4.5E+02	1.5E+03	1.8E-04	5.5E-05
Fluoranthene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.0E+01	2.0E+01	8.0E-03	4.0E-03
Fluorene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.0E+01	2.0E+01	8.0E-03	4.0E-03
Hexachlorobenzene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	7.5E-02	2.7E-01	1.1E+00	3.0E-01
Hexachlorobutadiene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.9E-01	1.9E-01	4.3E-01	4.3E-01
Hexachlorocyclopentadiene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	5.6E-01	1.0E+00	1.4E-01	7.9E-02
Hexachloroethane	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	9.4E-02	1.4E+00	8.6E-01	5.8E-02
Indeno(1,2,3-cd)pyrene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	8.1E-01	8.1E+00	1.0E-01	1.0E-02
Isophorone	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.7E+01	1.7E+02	4.6E-03	4.8E-04
Naphthalene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	6.7E+00	1.3E+01	1.2E-02	6.1E-03
Nitrobenzene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	3.7E-02	3.7E-01	2.2E+00	2.2E-01
N-Nitroso-di-n-propylamine	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	8.1E-03	8.1E-02	1.0E+01	1.0E+00
N-Nitrosodiphenylamine	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.9E+02	4.7E+01	4.3E-04	1.7E-03
Pentachlorophenol	***1.2E-04***	0.72	1.6E-05	0.55	1.0	2.3E-01	2.0E-01	2.0E+00	1.1E+00	1.1E-01
Phenanthrene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	1.4E+01	2.8E+01	5.7E-03	2.9E-03
Phenol	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	5.6E+01	1.1E+02	1.4E-03	7.2E-04
Pyrene	***4.8E-03***	0.72	6.3E-04	0.55	1.0	8.1E-02	6.1E+00	1.0E+01	1.3E-02	8.0E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - The dietary percentage of the pond and river fish/water were calculated by dividing the length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond fish/water ingestion = (1,375+2,770)/14956 = 0.28.
(c) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-22
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Adjacent River 2007
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Pond Fish (mg/kg)	Area Use Factor (a)	Dietary Percentage of Pond Fish (b)	Dose from Pond Fish (mg/kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Dietary Percentage of River Fish (b)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Surface Water (b)	Dose from Pond Surface Water (mg/kg/day)
Pesticides													
4,4'-DDD	0.14	***5.0E-03***	1.0	0.28	3.5E-04	1.1E-02	0.72	2.0E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
4,4'-DDE	0.14	***5.0E-03***	1.0	0.28	3.5E-04	1.8E-02	0.72	3.3E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
4,4'-DDT	0.14	***2.0E-02***	1.0	0.28	1.4E-03	1.3E-02	0.72	2.3E-03	0.10	4.8E-05	1.0	0.28	2.4E-06
Aldrin	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.3E-02***	0.72	2.2E-03	0.10	2.3E-05	1.0	0.28	1.2E-06
alpha-BHC	0.14	***2.6E-03***	1.0	0.28	1.8E-04	1.1E-02	0.72	2.0E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
alpha-Chlordane	0.14	***2.6E-03***	1.0	0.28	1.8E-04	1.2E-02	0.72	2.1E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
beta-BHC	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.3E-02***	0.72	2.2E-03	0.10	2.3E-05	1.0	0.28	1.2E-06
delta-BHC	0.14	2.4E-02	1.0	0.28	1.7E-03	***1.3E-02***	0.72	2.2E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Dieldrin	0.14	1.4E-01	1.0	0.28	9.8E-03	1.5E-02	0.72	2.7E-03	0.10	4.1E-05	1.0	0.28	2.0E-06
Endosulfan I	0.14	***2.6E-03***	1.0	0.28	1.8E-04	1.2E-02	0.72	2.1E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Endosulfan II	0.14	***5.0E-03***	1.0	0.28	3.5E-04	***1.3E-02***	0.72	2.2E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
Endosulfan Sulfate	0.14	***5.0E-03***	1.0	0.28	3.5E-04	***1.3E-02***	0.72	2.2E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
Endrin	0.14	***5.0E-03***	1.0	0.28	3.5E-04	1.2E-02	0.72	2.2E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
Endrin Aldehyde	0.14	***5.0E-03***	1.0	0.28	3.5E-04	1.2E-02	0.72	2.1E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
Endrin Ketone	0.14	3.6E-03	1.0	0.28	2.5E-04	***1.3E-02***	0.72	2.2E-03	0.10	***5.0E-05***	1.0	0.28	2.5E-06
gamma-BHC (Lindane)	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.3E-02***	0.72	2.2E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
gamma-Chlordane	0.14	***2.6E-03***	1.0	0.28	1.8E-04	1.1E-02	0.72	2.0E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Heptachlor	0.14	***2.6E-03***	1.0	0.28	1.8E-04	***1.3E-02***	0.72	2.2E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Heptachlor Epoxide	0.14	***2.6E-03***	1.0	0.28	1.8E-04	1.1E-02	0.72	1.9E-03	0.10	***2.5E-05***	1.0	0.28	1.3E-06
Methoxychlor	0.14	***2.6E-02***	1.0	0.28	1.8E-03	***5.0E-02***	0.72	9.0E-03	0.10	***2.5E-04***	1.0	0.28	1.3E-05
Toxaphene	0.14	***2.6E-01***	1.0	0.28	1.8E-02	***4.3E-01***	0.72	7.6E-02	0.10	***2.5E-03***	1.0	0.28	1.3E-04
Herbicides													
2,4-D	0.14	***1.3E-02***	1.0	0.28	8.7E-04	***4.2E-03***	0.72	7.4E-04	0.10	***2.5E-04***	1.0	0.28	1.3E-05
2,4-DB	0.14	***1.3E-02***	1.0	0.28	8.7E-04	***4.2E-03***	0.72	7.4E-04	0.10	***2.5E-04***	1.0	0.28	1.3E-05
2,4,5-T	0.14	***1.3E-02***	1.0	0.28	8.7E-04	5.7E-03	0.72	1.0E-03	0.10	***2.5E-04***	1.0	0.28	1.3E-05
2,4,5-TP (Silvex)	0.14	***1.3E-02***	1.0	0.28	8.7E-04	4.9E-03	0.72	8.7E-04	0.10	***2.5E-04***	1.0	0.28	1.3E-05
Dalapon	0.14	***3.0E+00***	1.0	0.28	2.1E-01	***1.0E+00***	0.72	1.8E-01	0.10	***6.0E-02***	1.0	0.28	3.0E-03
Dicamba	0.14	***3.0E-02***	1.0	0.28	2.1E-03	***1.0E-02***	0.72	1.8E-03	0.10	***6.0E-04***	1.0	0.28	3.0E-05
Dichlorprop	0.14	***1.5E-01***	1.0	0.28	1.0E-02	***5.0E-02***	0.72	9.0E-03	0.10	***3.0E-03***	1.0	0.28	1.5E-04
Dinoseb	0.14	***5.0E-01***	1.0	0.28	3.5E-02	***5.0E-02***	0.72	9.0E-03	0.10	***5.0E-03***	1.0	0.28	2.5E-04
MCPA	0.14	***3.0E+00***	1.0	0.28	2.1E-01	***1.0E+00***	0.72	1.8E-01	0.10	***6.0E-02***	1.0	0.28	3.0E-03
MCPP	0.14	***3.0E+00***	1.0	0.28	2.1E-01	2.3E+00	0.72	4.1E-01	0.10	***6.0E-02***	1.0	0.28	3.0E-03
PCBs													
Total PCBs	0.14	8.4E+00	1.0	0.28	5.9E-01	***2.5E-02***	0.72	4.5E-03	0.10	2.3E-04	1.0	0.28	1.1E-05
Dioxins/Furans (d)													
TEQ	0.14	9.9E-06	1.0	0.28	6.9E-07	1.5E-06	0.72	2.6E-07	0.10	8.1E-09	1.0	0.28	4.1E-10
Metals (e)													
Aluminum	0.14	1.6E+01	1.0	0.28	1.1E+00	***2.7E-01***	0.72	4.8E-02	0.10	1.1E+00	1.0	0.28	5.4E-02
Antimony	0.14	***9.0E-01***	1.0	0.28	6.3E-02	***4.0E-01***	0.72	7.2E-02	0.10	***8.3E-03***	1.0	0.28	4.2E-04
Arsenic	0.14	7.3E-01	1.0	0.28	5.1E-02	***5.7E-01***	0.72	1.0E-01	0.10	5.1E-03	1.0	0.28	2.5E-04
Barium	0.14	5.3E+00	1.0	0.28	3.7E-01	4.1E+01	0.72	7.4E+00	0.10	1.4E-01	1.0	0.28	7.1E-03
Beryllium	0.14	***1.8E-01***	1.0	0.28	1.3E-02	***1.2E-01***	0.72	2.2E-02	0.10	***2.0E-03***	1.0	0.28	1.0E-04
Cadmium	0.14	***2.3E-01***	1.0	0.28	1.6E-02	***2.3E+00***	0.72	4.1E-01	0.10	2.3E-03	1.0	0.28	1.1E-04
Chromium	0.14	3.3E-01	1.0	0.28	2.3E-02	***9.5E-02***	0.72	1.7E-02	0.10	5.1E-03	1.0	0.28	2.6E-04
Cobalt	0.14	***4.6E-01***	1.0	0.28	3.2E-02	***8.7E+00***	0.72	1.6E+00	0.10	5.5E-03	1.0	0.28	2.7E-04
Copper	0.14	9.1E-01	1.0	0.28	6.3E-02	***1.3E+00***	0.72	2.3E-01	0.10	7.3E-03	1.0	0.28	3.7E-04
Lead	0.14	***2.3E-01***	1.0	0.28	1.6E-02	***2.3E-04***	0.72	4.0E-05	0.10	4.0E-03	1.0	0.28	2.0E-04
Manganese	0.14	9.9E+00	1.0	0.28	6.9E-01	***8.7E+00***	0.72	1.6E+00	0.10	1.1E-01	1.0	0.28	5.5E-03
Mercury	0.14	6.2E-02	1.0	0.28	4.3E-03	***1.1E+00***	0.72	2.0E-01	0.10	9.7E-05	1.0	0.28	4.9E-06
Nickel	0.14	***1.8E+00***	1.0	0.28	1.3E-01	***1.6E+00***	0.72	2.8E-01	0.10	1.4E-02	1.0	0.28	7.2E-04
Selenium	0.14	***4.6E-01***	1.0	0.28	3.2E-02	***6.5E-01***	0.72	1.2E-01	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Silver	0.14	***4.6E-01***	1.0	0.28	3.2E-02	***4.4E-01***	0.72	7.9E-02	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Thallium	0.14	***4.6E-01***	1.0	0.28	3.2E-02	***1.3E+02***	0.72	2.2E+01	0.10	***5.0E-03***	1.0	0.28	2.5E-04
Vanadium	0.14	***4.6E-01***	1.0	0.28	3.2E-02	3.7E+00	0.72	6.7E-01	0.10	5.7E-03	1.0	0.28	2.9E-04
Zinc	0.14	4.6E+01	1.0	0.28	3.2E+00	***6.3E+00***	0.72	1.1E+00	0.10	2.2E-02	1.0	0.28	1.1E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - The dietary percentage of the pond and river fish/water were calculated by dividing the length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond fish/water ingestion = (1,375+2,770)/14956 = 0.28.
(c) - See Table III-C1.
(d) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.
(e) - Metals were not analyzed for whole-body river fish tissue. Therefore, the surface water values were multiplied by their surface water-to-fish bioconcentration factors (BCFs) (USEPA, 1999). See Table III-B10.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected value
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-22
Hazard Quotients for Ingestion of Fish and Surface Water
Mink
Adjacent River 2007
Sauget, IL

Analyte	Concentration of Contaminant in River Surface Water (All near shore sample locations except Plots 1 and 6) (mg/L)	Dietary Percentage of River Surface Water (b)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (c)		Hazard Quotient	
							(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides										
4,4'-DDD	***4.9E-05***	0.72	6.4E-06	0.55	1.0	2.4E-03	1.1E+00	5.3E+00	2.2E-03	4.5E-04
4,4'-DDE	***4.9E-05***	0.72	6.4E-06	0.55	1.0	3.7E-03	1.1E+00	5.3E+00	3.4E-03	6.9E-04
4,4'-DDT	***4.9E-05***	0.72	6.4E-06	0.55	1.0	3.7E-03	1.1E+00	5.3E+00	3.4E-03	6.9E-04
Aldrin	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.4E-03	1.7E-01	8.6E-01	1.4E-02	2.8E-03
alpha-BHC	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.2E-03	1.4E-02	1.4E-01	1.6E-01	1.6E-02
alpha-Chlordane	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.3E-03	2.5E+00	5.1E+00	9.0E-04	4.5E-04
beta-BHC	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.4E-03	3.4E-01	1.7E+00	7.1E-03	1.4E-03
delta-BHC	***2.5E-05***	0.72	3.2E-06	0.55	1.0	3.9E-03	1.4E-02	1.4E-01	2.8E-01	2.8E-02
Dieldrin	***4.9E-05***	0.72	6.4E-06	0.55	1.0	1.2E-02	2.1E-02	2.1E-01	5.9E-01	5.9E-02
Endosulfan I	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.3E-03	9.5E-02	9.5E-01	2.4E-02	2.4E-03
Endosulfan II	***4.9E-05***	0.72	6.4E-06	0.55	1.0	2.6E-03	9.5E-02	9.5E-01	2.7E-02	2.7E-03
Endosulfan Sulfate	***4.9E-05***	0.72	6.4E-06	0.55	1.0	2.6E-03	9.5E-02	9.5E-01	2.7E-02	2.7E-03
Endrin	***4.9E-05***	0.72	6.4E-06	0.55	1.0	2.5E-03	8.2E-02	8.2E-01	3.1E-02	3.1E-03
Endrin Aldehyde	***4.9E-05***	0.72	6.4E-06	0.55	1.0	2.4E-03	8.2E-02	8.2E-01	3.0E-02	3.0E-03
Endrin Ketone	***4.9E-05***	0.72	6.4E-06	0.55	1.0	2.5E-03	8.2E-02	8.2E-01	3.1E-02	3.1E-03
gamma-BHC (Lindane)	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.4E-03	5.3E+00	5.3E+01	4.5E-04	4.5E-05
gamma-Chlordane	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.2E-03	2.5E+00	5.1E+00	8.5E-04	4.3E-04
Heptachlor	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.4E-03	1.0E-01	1.0E+00	2.4E-02	2.4E-03
Heptachlor Epoxide	***2.5E-05***	0.72	3.2E-06	0.55	1.0	2.1E-03	1.4E-03	1.0E-02	1.5E+00	2.1E-01
Methoxychlor	***2.5E-04***	0.72	3.2E-05	0.55	1.0	1.1E-02	5.1E+00	1.0E+01	2.1E-03	1.1E-03
Toxaphene	***2.5E-03***	0.72	3.2E-04	0.55	1.0	9.4E-02	8.0E+00	8.0E+01	1.2E-02	1.2E-03
Herbicides										
2,4-D	***2.5E-04***	0.72	3.2E-05	0.55	1.0	1.7E-03	8.1E-01	4.1E+00	2.0E-03	4.1E-04
2,4-DB	***2.5E-04***	0.72	3.2E-05	0.55	1.0	1.7E-03	1.3E+00	4.1E+00	1.3E-03	4.0E-04
2,4,5-T	***2.5E-04***	0.72	3.2E-05	0.55	1.0	1.9E-03	2.8E+00	9.4E+00	6.9E-04	2.1E-04
2,4,5-TP (Silvex)	***2.5E-04***	0.72	3.2E-05	0.55	1.0	1.8E-03	8.7E-01	2.9E+00	2.0E-03	6.1E-04
Dalapon	***4.9E-03***	0.72	6.4E-04	0.55	1.0	3.9E-01	7.9E+00	2.7E+01	4.9E-02	1.5E-02
Dicamba	***2.5E-04***	0.72	3.2E-05	0.55	1.0	3.9E-03	3.0E+00	1.0E+01	1.3E-03	3.9E-04
Dichlorprop	1.1E-04	0.72	1.4E-05	0.55	1.0	2.0E-02	1.6E-01	1.6E+00	1.2E-01	1.2E-02
Dinoseb	***4.8E-03***	0.72	6.3E-04	0.55	1.0	4.4E-02	9.4E-02	9.4E-01	4.7E-01	4.7E-02
MCPA	***6.0E-02***	0.72	7.8E-03	0.55	1.0	4.0E-01	1.7E-01	8.7E-01	2.3E+00	4.6E-01
MCPP	***6.0E-02***	0.72	7.8E-03	0.55	1.0	6.3E-01	2.8E-01	8.5E-01	2.2E+00	7.5E-01
PCBs										
Total PCBs	NA	0.72	NA	0.55	1.0	5.9E-01	9.4E-02	9.4E-01	6.3E+00	6.3E-01
Dioxins/Furans (d)										
TEQ	NA	0.72	NA	0.55	1.0	9.5E-07	9.4E-07	9.4E-06	1.0E+00	1.0E-01
Metals (e)										
Aluminum	***1.0E-01***	0.72	1.3E-02	0.55	1.0	1.2E+00	1.6E+00	1.6E+01	7.9E-01	7.9E-02
Antimony	***1.0E-02***	0.72	1.3E-03	0.55	1.0	1.4E-01	1.0E-01	1.0E+00	1.3E+00	1.3E-01
Arsenic	***5.0E-03***	0.72	6.5E-04	0.55	1.0	1.5E-01	8.1E-02	8.1E-01	1.9E+00	1.9E-01
Barium	6.6E-02	0.72	8.5E-03	0.55	1.0	7.8E+00	3.9E+00	1.5E+01	2.0E+00	5.2E-01
Beryllium	***2.0E-03***	0.72	2.6E-04	0.55	1.0	3.5E-02	6.2E-01	6.2E+00	5.7E-02	5.7E-03
Cadmium	***2.5E-03***	0.72	3.2E-04	0.55	1.0	4.2E-01	5.6E-01	5.6E+00	7.6E-01	7.6E-02
Chromium	***5.0E-03***	0.72	6.5E-04	0.55	1.0	4.1E-02	3.1E+00	1.2E+01	1.3E-02	3.3E-03
Cobalt	***5.0E-03***	0.72	6.5E-04	0.55	1.0	1.6E+00	4.7E-02	4.7E-01	3.4E+01	3.4E+00
Copper	***1.8E-03***	0.72	2.4E-04	0.55	1.0	3.0E-01	1.2E+01	1.5E+01	2.5E-02	1.9E-02
Lead	***2.5E-03***	0.72	3.2E-04	0.55	1.0	1.6E-02	7.5E+00	7.5E+01	2.2E-03	2.2E-04
Manganese	***5.0E-03***	0.72	6.5E-04	0.55	1.0	2.3E+00	8.3E+01	2.7E+02	2.7E-02	8.4E-03
Mercury	***1.0E-04***	0.72	1.3E-05	0.55	1.0	2.0E-01	1.5E-02	2.5E-02	1.4E+01	8.2E+00
Nickel	***2.0E-02***	0.72	2.6E-03	0.55	1.0	4.1E-01	3.8E+01	7.5E+01	1.1E-02	5.4E-03
Selenium	***5.0E-03***	0.72	6.5E-04	0.55	1.0	1.5E-01	2.0E-01	3.3E-01	7.3E-01	4.4E-01
Silver	***5.0E-03***	0.72	6.5E-04	0.55	1.0	1.1E-01	1.5E-01	1.5E+00	7.6E-01	7.6E-02
Thallium	***1.3E-02***	0.72	1.6E-03	0.55	1.0	2.2E+01	6.0E-03	6.0E-02	3.7E+03	3.7E+02
Vanadium	2.2E-03	0.72	2.8E-04	0.55	1.0	7.0E-01	2.6E-01	2.6E+00	2.7E+00	2.7E-01
Zinc	***3.1E-03***	0.72	4.0E-04	0.55	1.0	4.3E+00	1.4E+02	2.7E+02	3.2E-02	1.6E-02

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - The dietary percentage of the pond and river fish/water were calculated by dividing the length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond fish/water ingestion = (1,375+2,770)/14956 = 0.28.
(c) - See Table III-C1.
(d) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.
(e) - Metals were not analyzed for whole-body river fish tissue. Therefore, the surface water values were multiplied by their surface water-to-fish bioconcentration factors (BCFs) (USEPA, 1999). See Table III-B10.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected value
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-23
Hazard Quotients for Ingestion of Fish and Surface Water
Osprey
Upstream River 2002
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Area Use Factor (a)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in River Surface Water (Plot 1) (mg/L)	Area Use Factor (a)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.0E+00	2.0E+01	6.8E-03	6.8E-04
1,2-Dichlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.3E-01	8.3E+00	1.6E-02	1.6E-03
1,3-Dichlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.3E-01	8.3E+00	1.6E-02	1.6E-03
1,4-Dichlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.3E-01	8.3E+00	1.6E-02	1.6E-03
2,2'-Oxybis(1-Chloropropane)	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
2,4-Dichlorophenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2,4-Dimethylphenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2,4-Dinitrophenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	9.9E+01	9.9E+02	6.7E-04	6.7E-05
2,4-Dinitrotoluene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2,6-Dinitrotoluene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2-Chloronaphthalene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.1E-03	6.1E-04
2-Chlorophenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.0E-03	6.0E-04
2-Methylnaphthalene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.1E-03	6.1E-04
2-Methylphenol (o-Cresol)	0.33	2.1E-01	0.25	1.1E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.1E-02	1.9E+00	1.9E+01	5.7E-03	5.7E-04
2-Nitroaniline	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	7.5E+00	7.5E+01	8.8E-03	8.8E-04
2-Nitrophenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.7E-01	8.7E+00	1.5E-02	1.5E-03
3/4-Methylphenol (m&p-Cresol)	0.33	***1.0E+00***	0.25	5.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	5.3E-02	1.9E+00	1.9E+01	2.8E-02	2.8E-03
3-Nitroaniline	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	2.6E+00	2.6E+01	2.5E-02	2.5E-03
4,6-Dinitro-2-methylphenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	9.4E-02	9.4E-01	7.0E-01	7.0E-02
4-Chloro-3-methylphenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.0E-03	6.0E-04
4-Chloroaniline	0.33	***5.0E-01***	0.25	2.6E-02	0.080	***1.0E-02***	0.25	1.3E-04	1.6	1.0	2.6E-02	1.7E+02	1.7E+03	1.5E-04	1.5E-05
4-Nitroaniline	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	3.9E+02	3.9E+03	1.7E-04	1.7E-05
4-Nitrophenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	8.7E-01	8.7E+00	7.6E-02	7.6E-03
Acenaphthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.0E+00	2.0E+01	6.7E-03	6.7E-04
Acenaphthylene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.4E+01	2.4E+02	5.6E-04	5.6E-05
Anthracene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.1E-03	6.1E-04
Benzo(a)anthracene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(a)pyrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(b)fluoranthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(g,h,i)perylene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(k)fluoranthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
bis(2-Chloroethoxy)methane	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
bis(2-Chloroethyl)ether	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
bis(2-Ethylhexyl)phthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	6.1E-03	0.25	7.8E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.2E-03	9.2E-04
Butyl Benzyl Phthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Chrysene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Dibenzo(a,h)anthracene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Dibenzofuran	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Diethyl Phthalate	0.33	2.1E-01	0.25	1.1E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.1E-02	1.3E+00	1.3E+01	8.7E-03	8.7E-04
Dimethyl Phthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Di-n-butylphthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E-01	1.5E+00	9.1E-02	9.1E-03
Di-n-octylphthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.5E+00	9.5E+01	1.4E-03	1.4E-04
Fluoranthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Fluorene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Hexachlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.4E+00	8.4E+01	1.6E-03	1.6E-04
Hexachlorobutadiene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	4.9E+00	4.9E+01	2.7E-03	2.7E-04
Hexachlorocyclopentadiene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	4.9E+00	4.9E+01	2.7E-03	2.7E-04
Hexachloroethane	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	4.9E+00	4.9E+01	2.7E-03	2.7E-04
Indeno(1,2,3-cd)pyrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Naphthalene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.4E+01	2.4E+02	5.6E-04	5.6E-05
Nitrobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	5.3E-01	5.3E+00	2.6E-02	2.6E-03
N-Nitroso-di-n-propylamine	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.4E+00	9.4E+01	1.4E-03	1.4E-04
N-Nitrosodiphenylamine	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.4E+00	9.4E+01	1.4E-03	1.4E-04
Pentachlorophenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	4.8E-04	0.25	6.1E-06	1.6	1.0	6.6E-02	1.3E+01	1.3E+02	4.9E-03	4.9E-04
Phenanthrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.4E+01	2.4E+02	5.6E-04	5.6E-05
Phenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.4E+00	1.4E+01	9.5E-03	9.5E-04
Pyrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-23
Hazard Quotients for Ingestion of Fish and Surface Water
Osprey
Upstream River 2002
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Area Use Factor (a)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in River Surface Water (Plot 1) (mg/L)	Area Use Factor (a)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	8.8E-04	2.4E-03	2.4E-02	3.7E-01	3.7E-02
4,4'-DDE	0.33	2.1E-02	0.25	1.1E-03	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	1.1E-03	2.4E-03	2.4E-02	4.6E-01	4.6E-02
4,4'-DDT	0.33	1.5E-02	0.25	7.9E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	7.9E-04	2.4E-03	2.4E-02	3.3E-01	3.3E-02
Aldrin	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	1.4E-01	1.4E+00	6.4E-03	6.4E-04
alpha-BHC	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	3.7E-03	1.5E-01	2.4E-01	5.9E-03
alpha-Chlordane	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	2.5E+02	1.2E+03	3.6E-06	7.1E-07
beta-BHC	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	3.7E-03	1.5E-01	2.4E-01	5.9E-03
delta-BHC	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	3.7E-03	1.5E-01	2.4E-01	5.9E-03
Dieldrin	0.33	2.1E-02	0.25	1.1E-03	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	1.1E-03	9.8E-02	9.8E-01	1.1E-02	1.1E-03
Endosulfan I	0.33	1.4E-02	0.25	7.1E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	7.1E-04	1.3E+01	1.3E+02	5.4E-05	5.4E-06
Endosulfan II	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	8.8E-04	1.3E+01	1.3E+02	6.7E-05	6.7E-06
Endosulfan Sulfate	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	8.8E-04	1.3E+01	1.3E+02	6.7E-05	6.7E-06
Endrin	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	8.8E-04	1.7E-02	1.7E-01	5.1E-02	5.1E-03
Endrin Aldehyde	0.33	1.3E-02	0.25	6.6E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	6.6E-04	1.7E-02	1.7E-01	3.8E-02	3.8E-03
Endrin Ketone	0.33	***1.7E-02***	0.25	8.8E-04	0.080	2.6E-05	0.25	3.3E-07	1.6	1.0	8.8E-04	1.7E-02	1.7E-01	5.1E-02	5.1E-03
gamma-BHC (Lindane)	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	2.5E+00	2.5E+01	3.5E-04	3.5E-05
gamma-Chlordane	0.33	1.4E-02	0.25	7.6E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	7.6E-04	2.5E+02	1.2E+03	3.1E-06	6.2E-07
Heptachlor	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	1.0E-01	1.0E+00	8.5E-03	8.5E-04
Heptachlor Epoxide	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	1.0E-01	1.0E+00	8.5E-03	8.5E-04
Methoxychlor	0.33	***6.7E-02***	0.25	3.5E-03	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	3.5E-03	1.4E+02	1.4E+03	2.5E-05	2.5E-06
Toxaphene	0.33	***5.7E-01***	0.25	3.0E-02	0.080	***2.5E-03***	0.25	3.2E-05	1.6	1.0	3.0E-02	2.0E+00	9.8E+00	1.5E-02	3.0E-03
Herbicides															
2,4-D	0.33	***4.2E-03***	0.25	2.2E-04	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	2.2E-04	5.3E+00	5.3E+01	4.2E-05	4.2E-06
2,4-DB	0.33	***4.2E-03***	0.25	2.2E-04	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	2.2E-04	5.3E+00	5.3E+01	4.2E-05	4.2E-06
2,4,5-T	0.33	5.1E-03	0.25	2.7E-04	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	2.7E-04	7.7E+00	7.7E+01	3.6E-05	3.6E-06
2,4,5-TP (Silvex)	0.33	5.3E-03	0.25	2.8E-04	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	2.8E-04	7.7E+00	7.7E+01	3.6E-05	3.6E-06
Dalapon	0.33	***1.0E+00***	0.25	5.3E-02	0.080	***6.0E-02***	0.25	7.7E-04	1.6	1.0	5.3E-02	1.5E+01	1.5E+02	3.5E-03	3.5E-04
Dicamba	0.33	7.2E-03	0.25	3.8E-04	0.080	***6.0E-04***	0.25	7.7E-06	1.6	1.0	3.9E-04	1.9E+01	1.9E+02	2.0E-05	2.0E-06
Dinoseb	0.33	***5.0E-02***	0.25	2.6E-03	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	2.7E-03	1.1E-01	1.1E+00	2.5E-02	2.5E-03
MCPA	0.33	***1.0E+00***	0.25	5.3E-02	0.080	***6.0E-02***	0.25	7.7E-04	1.6	1.0	5.3E-02	5.8E+00	5.8E+01	9.2E-03	9.2E-04
MCPP	0.33	***1.0E+00***	0.25	5.3E-02	0.080	***6.0E-02***	0.25	7.7E-04	1.6	1.0	5.3E-02	1.1E+01	1.1E+02	5.0E-03	5.0E-04
PCBs															
Total PCBs	0.33	***2.5E-02***	0.25	1.3E-03	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	1.3E-03	7.7E+00	7.7E+01	1.7E-04	1.7E-05
Dioxins/Furans															
TEQ	0.33	2.9E-06	0.25	1.5E-07	0.080	***3.2E-09***	0.25	4.1E-11	1.6	1.0	1.5E-07	1.5E-06	1.5E-05	1.0E-01	1.0E-02
Metals (c)															
Aluminum	0.33	1.9E+00	0.25	1.0E-01	0.080	7.1E-01	0.25	9.0E-03	1.6	1.0	1.1E-01	1.5E+02	1.5E+03	7.4E-04	7.4E-05
Antimony	0.33	***4.0E-01***	0.25	2.1E-02	0.080	***1.0E-02***	0.25	1.3E-04	1.6	1.0	2.1E-02	1.1E+00	6.7E+00	2.0E-02	3.2E-03
Arsenic	0.33	***5.7E-01***	0.25	3.0E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	3.0E-02	6.9E+00	1.7E+01	4.4E-03	1.8E-03
Barium	0.33	3.7E+01	0.25	1.9E+00	0.080	5.9E-02	0.25	7.5E-04	1.6	1.0	1.9E+00	3.5E+01	6.9E+01	5.6E-02	2.8E-02
Beryllium	0.33	***1.2E-01***	0.25	6.5E-03	0.080	***2.0E-03***	0.25	2.6E-05	1.6	1.0	6.5E-03	1.5E+00	2.1E+01	4.3E-03	3.1E-04
Cadmium	0.33	***2.3E+00***	0.25	1.2E-01	0.080	***2.5E-03***	0.25	3.2E-05	1.6	1.0	1.2E-01	1.5E+00	2.1E+01	7.8E-02	5.6E-03
Chromium	0.33	***9.5E-02***	0.25	5.0E-03	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	5.1E-03	1.1E+00	6.7E+00	4.8E-03	7.6E-04
Cobalt	0.33	7.8E+00	0.25	4.1E-01	0.080	4.5E-03	0.25	5.8E-05	1.6	1.0	4.1E-01	8.9E-02	4.4E-01	4.6E+00	9.3E-01
Copper	0.33	***7.1E+00***	0.25	3.7E-01	0.080	***1.0E-02***	0.25	1.3E-04	1.6	1.0	3.7E-01	5.8E+01	7.6E+01	6.4E-03	4.9E-03
Lead	0.33	***2.3E-04***	0.25	1.2E-05	0.080	***2.5E-03***	0.25	3.2E-05	1.6	1.0	4.4E-05	6.3E+00	6.3E+01	6.9E-06	6.9E-07
Manganese	0.33	1.4E+02	0.25	7.4E+00	0.080	8.1E-02	0.25	1.0E-03	1.6	1.0	7.4E+00	1.8E+03	1.8E+04	4.0E-03	4.0E-04
Mercury	0.33	***1.1E+00***	0.25	5.9E-02	0.080	***1.0E-04***	0.25	1.3E-06	1.6	1.0	5.9E-02	6.8E-03	6.8E-02	8.7E+00	8.7E-01
Nickel	0.33	***1.6E+00***	0.25	8.2E-02	0.080	***2.0E-02***	0.25	2.6E-04	1.6	1.0	8.2E-02	8.9E+01	1.2E+02	9.3E-04	6.7E-04
Selenium	0.33	***6.5E-01***	0.25	3.4E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	3.4E-02	5.3E-01	1.1E+00	6.4E-02	3.2E-02
Silver	0.33	***4.4E-01***	0.25	2.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	2.3E-02	1.9E+02	1.9E+03	1.2E-04	1.2E-05
Thallium	0.33	5.0E+01	0.25	2.6E+00	0.080	5.0E-03	0.25	6.4E-05	1.6	1.0	2.6E+00	9.2E-01	9.2E+00	2.9E+00	2.9E-01
Vanadium	0.33	8.3E+00	0.25	4.4E-01	0.080	4.8E-03	0.25	6.1E-05	1.6	1.0	4.4E-01	1.2E+01	1.2E+02	3.6E-02	3.6E-03
Zinc	0.33	1.9E+01	0.25	1.0E+00	0.080	9.3E-03	0.25	1.2E-04	1.6	1.0	1.0E+00	1.9E+01	1.7E+02	5.3E-02	5.9E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1.
(c) - Metals were not analyzed for whole-body river fish tissue. Therefore, the surface water values were multiplied by their surface water-to-fish bioconcentration factors (BCFs) (USEPA, 1999). See Table III-B13.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values.
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-24
Hazard Quotients for Ingestion of Fish and Surface Water
Osprey
Adjacent River 2002
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Area Use Factor (a)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in River Surface Water (All sample locations except Plots 1 and 6) (mg/L)	Area Use Factor (a)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.0E+00	2.0E+01	6.8E-03	6.8E-04
1,2-Dichlorobenzene	0.33	2.3E-01	0.25	1.2E-02	0.080	6.0E-03	0.25	7.6E-05	1.6	1.0	1.2E-02	8.3E-01	8.3E+00	1.4E-02	1.4E-03
1,3-Dichlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.3E-01	8.3E+00	1.6E-02	1.6E-03
1,4-Dichlorobenzene	0.33	2.4E-01	0.25	1.3E-02	0.080	5.0E-03	0.25	6.3E-05	1.6	1.0	1.3E-02	8.3E-01	8.3E+00	1.5E-02	1.5E-03
2,2'-oxybis (1-chloropropane)	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
2,4-Dichlorophenol	0.33	2.3E-01	0.25	1.2E-02	0.080	6.1E-03	0.25	7.8E-05	1.6	1.0	1.2E-02	9.9E+01	9.9E+02	1.2E-04	1.2E-05
2,4-Dimethylphenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	5.1E-03	0.25	6.5E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2,4-Dinitrophenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	9.9E+01	9.9E+02	6.7E-04	6.7E-05
2,4-Dinitrotoluene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2,6-Dinitrotoluene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	5.4E-03	0.25	6.9E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2-Chloronaphthalene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.1E-03	6.1E-04
2-Chlorophenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	5.3E-03	0.25	6.8E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.0E-03	6.0E-04
2-Methylnaphthalene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.1E-03	6.1E-04
2-Methylphenol	0.33	2.2E-01	0.25	1.2E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.2E-02	1.9E+00	1.9E+01	6.1E-03	6.1E-04
2-Nitroaniline	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	7.5E+00	7.5E+01	8.8E-03	8.8E-04
2-Nitrophenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.7E-01	8.7E+00	1.5E-02	1.5E-03
3/4-Methylphenol	0.33	***1.0E+00***	0.25	5.3E-02	0.080	5.6E-03	0.25	7.1E-05	1.6	1.0	5.3E-02	1.9E+00	1.9E+01	2.8E-02	2.8E-03
3-Nitroaniline	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	2.6E+00	2.6E+01	2.5E-02	2.5E-03
4,6-Dinitro-2-Methylphenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	9.4E-02	9.4E-01	7.0E-01	7.0E-02
4-Chloro-3-methylphenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.0E-03	6.0E-04
4-Chloroaniline	0.33	***5.0E-01***	0.25	2.6E-02	0.080	1.2E-02	0.25	1.6E-04	1.6	1.0	2.6E-02	1.7E+02	1.7E+03	1.5E-04	1.5E-05
4-Nitroaniline	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	3.9E+02	3.9E+03	1.7E-04	1.7E-05
4-Nitrophenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	8.7E-01	8.7E+00	7.6E-02	7.6E-03
Acenaphthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.0E+00	2.0E+01	6.7E-03	6.7E-04
Acenaphthylene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.4E+01	2.4E+02	5.6E-04	5.6E-05
Anthracene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.1E-03	6.1E-04
Benzo(a)anthracene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(a)pyrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(b)fluoranthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(ghi)perylene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(k)fluoranthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Bis(2-chloroethoxy)methane	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Bis(2-chloroethyl)ether	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Bis(2-ethylhexyl)phthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Butylbenzylphthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Chrysene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Dibenzo(ah)anthracene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Dibenzofuran	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Diethyl phthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Dimethyl phthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Di-n-butylphthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E-01	1.5E+00	9.1E-02	9.1E-03
Di-n-octylphthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.5E+00	9.5E+01	1.4E-03	1.4E-04
Fluoranthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Fluorene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Hexachlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.4E+00	8.4E+01	1.6E-03	1.6E-04
Hexachlorobutadiene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	4.9E+00	4.9E+01	2.7E-03	2.7E-04
Hexachlorocyclopentadiene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	4.9E+00	4.9E+01	2.7E-03	2.7E-04
Hexachloroethane	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	4.9E+00	4.9E+01	2.7E-03	2.7E-04
Indeno(1,2,3-cd)pyrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Naphthalene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	5.5E-03	0.25	7.0E-05	1.6	1.0	1.3E-02	2.4E+01	2.4E+02	5.6E-04	5.6E-05
Nitrobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	4.9E-03	0.25	6.3E-05	1.6	1.0	1.3E-02	5.3E-01	5.3E+00	2.6E-02	2.6E-03
N-nitroso-di-n-propylamine	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.4E+00	9.4E+01	1.4E-03	1.4E-04
N-nitrosodiphenylamine	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.4E+00	9.4E+01	1.4E-03	1.4E-04
Pentachlorophenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	5.4E-04	0.25	6.9E-06	1.6	1.0	6.6E-02	1.3E+01	1.3E+02	4.9E-03	4.9E-04
Phenanthrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.4E+01	2.4E+02	5.6E-04	5.6E-05
Phenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	5.7E-03	0.25	7.2E-05	1.6	1.0	1.3E-02	1.4E+00	1.4E+01	9.5E-03	9.5E-04
Pyrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-24
Hazard Quotients for Ingestion of Fish and Surface Water
Osprey
Adjacent River 2002
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Area Use Factor (a)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in River Surface Water (All sample locations except Plots 1 and 6) (mg/L)	Area Use Factor (a)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	0.33	1.1E-02	0.25	5.9E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	5.9E-04	2.4E-03	2.4E-02	2.5E-01	2.5E-02
4,4'-DDE	0.33	1.8E-02	0.25	9.7E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	9.7E-04	2.4E-03	2.4E-02	4.1E-01	4.1E-02
4,4'-DDT	0.33	1.3E-02	0.25	6.6E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	6.6E-04	2.4E-03	2.4E-02	2.8E-01	2.8E-02
Aldrin	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	6.6E-04	1.4E-01	1.4E+00	4.8E-03	4.8E-04
alpha-BHC	0.33	1.1E-02	0.25	6.0E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	6.0E-04	3.7E-03	1.5E-01	1.6E-01	4.0E-03
alpha-Chlordane	0.33	1.2E-02	0.25	6.1E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	6.1E-04	2.5E+02	1.2E+03	2.5E-06	5.0E-07
beta-BHC	0.33	***1.3E-02***	0.25	6.6E-04	0.080	2.4E-05	0.25	3.1E-07	1.6	1.0	6.6E-04	3.7E-03	1.5E-01	1.8E-01	4.4E-03
delta-BHC	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	6.6E-04	3.7E-03	1.5E-01	1.8E-01	4.4E-03
Dieldrin	0.33	1.5E-02	0.25	7.8E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	7.8E-04	9.8E-02	9.8E-01	8.0E-03	8.0E-04
Endosulfan I	0.33	1.2E-02	0.25	6.1E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	6.1E-04	1.3E+01	1.3E+02	4.6E-05	4.6E-06
Endosulfan II	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	6.6E-04	1.3E+01	1.3E+02	5.0E-05	5.0E-06
Endosulfan Sulfate	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	6.6E-04	1.3E+01	1.3E+02	5.0E-05	5.0E-06
Endrin	0.33	1.2E-02	0.25	6.4E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	6.4E-04	1.7E-02	1.7E-01	3.8E-02	3.8E-03
Endrin Aldehyde	0.33	1.2E-02	0.25	6.1E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	6.1E-04	1.7E-02	1.7E-01	3.6E-02	3.6E-03
Endrin Ketone	0.33	***1.3E-02***	0.25	6.6E-04	0.080	4.8E-05	0.25	6.1E-07	1.6	1.0	6.6E-04	1.7E-02	1.7E-01	3.8E-02	3.8E-03
gamma-BHC (Lindane)	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	6.6E-04	2.5E+00	2.5E+01	2.6E-04	2.6E-05
gamma-Chlordane	0.33	1.1E-02	0.25	5.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	5.8E-04	2.5E+02	1.2E+03	2.3E-06	4.7E-07
Heptachlor	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	6.6E-04	1.0E-01	1.0E+00	6.3E-03	6.3E-04
Heptachlor Epoxide	0.33	1.1E-02	0.25	5.6E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	5.6E-04	1.0E-01	1.0E+00	5.4E-03	5.4E-04
Methoxychlor	0.33	***5.0E-02***	0.25	2.6E-03	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	2.6E-03	1.4E+02	1.4E+03	1.9E-05	1.9E-06
Toxaphene	0.33	***4.3E-01***	0.25	2.2E-02	0.080	***2.5E-03***	0.25	3.2E-05	1.6	1.0	2.2E-02	2.0E+00	9.8E+00	1.1E-02	2.3E-03
Herbicides															
2,4-D	0.33	***4.2E-03***	0.25	2.2E-04	0.080	2.2E-03	0.25	2.9E-05	1.6	1.0	2.5E-04	5.3E+00	5.3E+01	4.7E-05	4.7E-06
2,4-DB	0.33	***4.2E-03***	0.25	2.2E-04	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	2.2E-04	5.3E+00	5.3E+01	4.2E-05	4.2E-06
2,4,5-T	0.33	5.7E-03	0.25	3.0E-04	0.080	2.5E-04	0.25	3.2E-06	1.6	1.0	3.0E-04	7.7E+00	7.7E+01	4.0E-05	4.0E-06
2,4,5-TP (Silvex)	0.33	4.9E-03	0.25	2.6E-04	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	2.6E-04	7.7E+00	7.7E+01	3.4E-05	3.4E-06
Dalapon	0.33	***1.0E+00***	0.25	5.3E-02	0.080	***6.0E-02***	0.25	7.7E-04	1.6	1.0	5.3E-02	1.5E+01	1.5E+02	3.5E-03	3.5E-04
Dicamba	0.33	***1.0E-02***	0.25	5.3E-04	0.080	***6.0E-04***	0.25	7.7E-06	1.6	1.0	5.3E-04	1.9E+01	1.9E+02	2.8E-05	2.8E-06
Dinoseb	0.33	***5.0E-02***	0.25	2.6E-03	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	2.7E-03	1.1E-01	1.1E+00	2.5E-02	2.5E-03
MCPA	0.33	***1.0E+00***	0.25	5.3E-02	0.080	5.9E-02	0.25	7.5E-04	1.6	1.0	5.3E-02	5.8E+00	5.8E+01	9.2E-03	9.2E-04
MCPP	0.33	2.3E+00	0.25	1.2E-01	0.080	6.0E-02	0.25	7.6E-04	1.6	1.0	1.2E-01	1.1E+01	1.1E+02	1.1E-02	1.1E-03
PCBs															
Total PCBs	0.33	***2.5E-02***	0.25	1.3E-03	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	1.3E-03	7.7E+00	7.7E+01	1.7E-04	1.7E-05
Dioxins/Furans															
TEQ	0.33	2.8E-06	0.25	1.5E-07	0.080	***2.4E-09***	0.25	3.0E-11	1.6	1.0	1.5E-07	1.5E-06	1.5E-05	9.5E-02	9.5E-03
Metals (c)															
Aluminum	0.33	2.0E+00	0.25	1.1E-01	0.080	7.5E-01	0.25	9.6E-03	1.6	1.0	1.2E-01	1.5E+02	1.5E+03	7.9E-04	7.9E-05
Antimony	0.33	***4.0E-01***	0.25	2.1E-02	0.080	***1.0E-02***	0.25	1.3E-04	1.6	1.0	2.1E-02	1.1E+00	6.7E+00	2.0E-02	3.2E-03
Arsenic	0.33	5.6E-01	0.25	3.0E-02	0.080	4.9E-03	0.25	6.3E-05	1.6	1.0	3.0E-02	6.9E+00	1.7E+01	4.3E-03	1.7E-03
Barium	0.33	3.9E+01	0.25	2.0E+00	0.080	6.1E-02	0.25	7.8E-04	1.6	1.0	2.0E+00	3.5E+01	6.9E+01	5.9E-02	2.9E-02
Beryllium	0.33	***1.2E-01***	0.25	6.5E-03	0.080	***2.0E-03***	0.25	2.6E-05	1.6	1.0	6.5E-03	1.5E+00	2.1E+01	4.3E-03	3.1E-04
Cadmium	0.33	***2.3E+00***	0.25	1.2E-01	0.080	***2.5E-03***	0.25	3.2E-05	1.6	1.0	1.2E-01	1.5E+00	2.1E+01	7.8E-02	5.6E-03
Chromium	0.33	***9.5E-02***	0.25	5.0E-03	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	5.1E-03	1.1E+00	6.7E+00	4.8E-03	7.6E-04
Cobalt	0.33	7.6E+00	0.25	4.0E-01	0.080	4.4E-03	0.25	5.6E-05	1.6	1.0	4.0E-01	8.9E-02	4.4E-01	4.5E+00	9.0E-01
Copper	0.33	7.5E+00	0.25	3.9E-01	0.080	1.1E-02	0.25	1.4E-04	1.6	1.0	4.0E-01	5.8E+01	7.6E+01	6.8E-03	5.2E-03
Lead	0.33	2.4E-04	0.25	1.2E-05	0.080	2.6E-03	0.25	3.4E-05	1.6	1.0	4.6E-05	6.3E+00	6.3E+01	7.3E-06	7.3E-07
Manganese	0.33	1.5E+02	0.25	7.9E+00	0.080	8.6E-02	0.25	1.1E-03	1.6	1.0	7.9E+00	1.8E+03	1.8E+04	4.3E-03	4.3E-04
Mercury	0.33	1.2E+00	0.25	6.1E-02	0.080	1.0E-04	0.25	1.3E-06	1.6	1.0	6.1E-02	6.8E-03	6.8E-02	9.0E+00	9.0E-01
Nickel	0.33	***1.6E+00***	0.25	8.2E-02	0.080	***2.0E-02***	0.25	2.6E-04	1.6	1.0	8.2E-02	8.9E+01	1.2E+02	9.3E-04	6.7E-04
Selenium	0.33	***6.5E-01***	0.25	3.4E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	3.4E-02	5.3E-01	1.1E+00	6.4E-02	3.2E-02
Silver	0.33	4.3E-01	0.25	2.2E-02	0.080	4.9E-03	0.25	6.2E-05	1.6	1.0	2.2E-02	1.9E+02	1.9E+03	1.2E-04	1.2E-05
Thallium	0.33	***5.0E+01***	0.25	2.6E+00	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	2.6E+00	9.2E-01	9.2E+00	2.9E+00	2.9E-01
Vanadium	0.33	8.5E+00	0.25	4.5E-01	0.080	4.9E-03	0.25	6.2E-05	1.6	1.0	4.5E-01	1.2E+01	1.2E+02	3.7E-02	3.7E-03
Zinc	0.33	2.2E+01	0.25	1.2E+00	0.080	1.1E-02	0.25	1.4E-04	1.6	1.0	1.2E+00	1.9E+01	1.7E+02	6.2E-02	6.9E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1.
(c) - Metals were not analyzed for whole-body river fish tissue. Therefore, the surface water values were multiplied by their surface water-to-fish bioconcentration factors (BCFs) (USEPA, 1999). See Table III-B13.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values.
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-25
Hazard Quotients for Ingestion of Fish and Surface Water
Osprey
Downstream River 2002
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Area Use Factor (a)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in River Surface Water (Plot 6) (mg/L)	Area Use Factor (a)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.0E+00	2.0E+01	6.8E-03	6.8E-04
1,2-Dichlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.3E-01	8.3E+00	1.6E-02	1.6E-03
1,3-Dichlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.3E-01	8.3E+00	1.6E-02	1.6E-03
1,4-Dichlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.3E-01	8.3E+00	1.6E-02	1.6E-03
2,2'-oxybis (1-chloropropane)	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
2,4-Dichlorophenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2,4-Dimethylphenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2,4-Dinitrophenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	9.9E+01	9.9E+02	6.7E-04	6.7E-05
2,4-Dinitrotoluene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2,6-Dinitrotoluene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2-Chloronaphthalene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.1E-03	6.1E-04
2-Chlorophenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.0E-03	6.0E-04
2-Methylnaphthalene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.1E-03	6.1E-04
2-Methylphenol	0.33	3.2E-01	0.25	1.7E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.7E-02	1.9E+00	1.9E+01	8.8E-03	8.8E-04
2-Nitroaniline	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	7.5E+00	7.5E+01	8.8E-03	8.8E-04
2-Nitrophenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.7E-01	8.7E+00	1.5E-02	1.5E-03
3/4-Methylphenol	0.33	***1.0E+00***	0.25	5.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	5.3E-02	1.9E+00	1.9E+01	2.8E-02	2.8E-03
3-Nitroaniline	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	2.6E+00	2.6E+01	2.5E-02	2.5E-03
4,6-Dinitro-2-Methylphenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	9.4E-02	9.4E-01	7.0E-01	7.0E-02
4-Chloro-3-methylphenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.0E-03	6.0E-04
4-Chloroaniline	0.33	***5.0E-01***	0.25	2.6E-02	0.080	***1.0E-02***	0.25	1.3E-04	1.6	1.0	2.6E-02	1.7E+02	1.7E+03	1.5E-04	1.5E-05
4-Nitroaniline	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	3.9E+02	3.9E+03	1.7E-04	1.7E-05
4-Nitrophenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.5E-02***	0.25	3.2E-04	1.6	1.0	6.6E-02	8.7E-01	8.7E+00	7.6E-02	7.6E-03
Acenaphthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.0E+00	2.0E+01	6.7E-03	6.7E-04
Acenaphthylene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.4E+01	2.4E+02	5.6E-04	5.6E-05
Anthracene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.1E-03	6.1E-04
Benzo(a)anthracene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(a)pyrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(b)fluoranthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(ghi)perylene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(k)fluoranthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Bis(2-chloroethoxy)methane	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Bis(2-chloroethyl)ether	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Bis(2-ethylhexyl)phthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	4.5E-03	0.25	5.8E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Butylbenzylphthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Chrysene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Dibenzo(ah)anthracene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Dibenzofuran	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Diethyl phthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Dimethyl phthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Di-n-butylphthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.5E-01	1.5E+00	9.1E-02	9.1E-03
Di-n-octylphthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.5E+00	9.5E+01	1.4E-03	1.4E-04
Fluoranthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Fluorene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Hexachlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	8.4E+00	8.4E+01	1.6E-03	1.6E-04
Hexachlorobutadiene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	4.9E+00	4.9E+01	2.7E-03	2.7E-04
Hexachlorocyclopentadiene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	4.9E+00	4.9E+01	2.7E-03	2.7E-04
Hexachloroethane	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	4.9E+00	4.9E+01	2.7E-03	2.7E-04
Indeno(1,2,3-cd)pyrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Naphthalene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.4E+01	2.4E+02	5.6E-04	5.6E-05
Nitrobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	5.3E-01	5.3E+00	2.6E-02	2.6E-03
N-nitroso-di-n-propylamine	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.4E+00	9.4E+01	1.4E-03	1.4E-04
N-nitrosodiphenylamine	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	9.4E+00	9.4E+01	1.4E-03	1.4E-04
Pentachlorophenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***5.0E-04***	0.25	6.4E-06	1.6	1.0	6.6E-02	1.3E+01	1.3E+02	4.9E-03	4.9E-04
Phenanthrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	2.4E+01	2.4E+02	5.6E-04	5.6E-05
Phenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	4.4E-03	0.25	5.6E-05	1.6	1.0	1.3E-02	1.4E+00	1.4E+01	9.5E-03	9.5E-04
Pyrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-25
Hazard Quotients for Ingestion of Fish and Surface Water
Osprey
Downstream River 2002
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Area Use Factor (a)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in River Surface Water (Plot 6) (mg/L)	Area Use Factor (a)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	0.33	1.7E-02	0.25	8.7E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	8.7E-04	2.4E-03	2.4E-02	3.6E-01	3.6E-02
4,4'-DDE	0.33	1.3E-02	0.25	7.0E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	7.0E-04	2.4E-03	2.4E-02	3.0E-01	3.0E-02
4,4'-DDT	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	8.8E-04	2.4E-03	2.4E-02	3.7E-01	3.7E-02
Aldrin	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	1.4E-01	1.4E+00	6.4E-03	6.4E-04
alpha-BHC	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	3.7E-03	1.5E-01	2.4E-01	5.9E-03
alpha-Chlordane	0.33	1.1E-02	0.25	5.7E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	5.7E-04	2.5E+02	1.2E+03	2.3E-06	4.7E-07
beta-BHC	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	3.7E-03	1.5E-01	2.4E-01	5.9E-03
delta-BHC	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	3.7E-03	1.5E-01	2.4E-01	5.9E-03
Dieldrin	0.33	1.4E-02	0.25	7.3E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	7.3E-04	9.8E-02	9.8E-01	7.5E-03	7.5E-04
Endosulfan I	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	1.3E+01	1.3E+02	6.7E-05	6.7E-06
Endosulfan II	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	8.8E-04	1.3E+01	1.3E+02	6.7E-05	6.7E-06
Endosulfan Sulfate	0.33	1.7E-02	0.25	8.7E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	8.7E-04	1.3E+01	1.3E+02	6.6E-05	6.6E-06
Endrin	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	8.8E-04	1.7E-02	1.7E-01	5.1E-02	5.1E-03
Endrin Aldehyde	0.33	1.4E-02	0.25	7.4E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	7.4E-04	1.7E-02	1.7E-01	4.3E-02	4.3E-03
Endrin Ketone	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***5.0E-05***	0.25	6.4E-07	1.6	1.0	8.8E-04	1.7E-02	1.7E-01	5.1E-02	5.1E-03
gamma-BHC (Lindane)	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	2.5E+00	2.5E+01	3.5E-04	3.5E-05
gamma-Chlordane	0.33	1.4E-02	0.25	7.2E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	7.2E-04	2.5E+02	1.2E+03	2.9E-06	5.8E-07
Heptachlor	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	1.0E-01	1.0E+00	8.5E-03	8.5E-04
Heptachlor Epoxide	0.33	***1.7E-02***	0.25	8.8E-04	0.080	***2.5E-05***	0.25	3.2E-07	1.6	1.0	8.8E-04	1.0E-01	1.0E+00	8.5E-03	8.5E-04
Methoxychlor	0.33	***6.7E-02***	0.25	3.5E-03	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	3.5E-03	1.4E+02	1.4E+03	2.5E-05	2.5E-06
Toxaphene	0.33	***5.7E-01***	0.25	3.0E-02	0.080	***2.5E-03***	0.25	3.2E-05	1.6	1.0	3.0E-02	2.0E+00	9.8E+00	1.5E-02	3.0E-03
Herbicides															
2,4-D	0.33	***4.2E-03***	0.25	2.2E-04	0.080	8.1E-04	0.25	1.0E-05	1.6	1.0	2.3E-04	5.3E+00	5.3E+01	4.3E-05	4.3E-06
2,4-DB	0.33	***4.2E-03***	0.25	2.2E-04	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	2.2E-04	5.3E+00	5.3E+01	4.2E-05	4.2E-06
2,4,5-T	0.33	***4.2E-03***	0.25	2.2E-04	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	2.2E-04	7.7E+00	7.7E+01	2.9E-05	2.9E-06
2,4,5-TP (Silvex)	0.33	5.0E-03	0.25	2.6E-04	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	2.6E-04	7.7E+00	7.7E+01	3.4E-05	3.4E-06
Dalapon	0.33	***1.0E+00***	0.25	5.3E-02	0.080	***6.0E-02***	0.25	7.7E-04	1.6	1.0	5.3E-02	1.5E+01	1.5E+02	3.5E-03	3.5E-04
Dicamba	0.33	***1.0E-02***	0.25	5.3E-04	0.080	***6.0E-04***	0.25	7.7E-06	1.6	1.0	5.3E-04	1.9E+01	1.9E+02	2.8E-05	2.8E-06
Dinoseb	0.33	***5.0E-02***	0.25	2.6E-03	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	2.7E-03	1.1E-01	1.1E+00	2.5E-02	2.5E-03
MCPA	0.33	***1.0E+00***	0.25	5.3E-02	0.080	***6.0E-02***	0.25	7.7E-04	1.6	1.0	5.3E-02	5.8E+00	5.8E+01	9.2E-03	9.2E-04
MCPP	0.33	***1.0E+00***	0.25	5.3E-02	0.080	***6.0E-02***	0.25	7.7E-04	1.6	1.0	5.3E-02	1.1E+01	1.1E+02	5.0E-03	5.0E-04
PCBs															
Total PCBs	0.33	***2.5E-02***	0.25	1.3E-03	0.080	***2.5E-04***	0.25	3.2E-06	1.6	1.0	1.3E-03	7.7E+00	7.7E+01	1.7E-04	1.7E-05
Dioxins/Furans															
TEQ	0.33	2.1E-06	0.25	1.1E-07	0.080	***2.7E-09***	0.25	3.4E-11	1.6	1.0	1.1E-07	1.5E-06	1.5E-05	7.3E-02	7.3E-03
Metals (c)															
Aluminum	0.33	2.2E+00	0.25	1.1E-01	0.080	8.1E-01	0.25	1.0E-02	1.6	1.0	1.3E-01	1.5E+02	1.5E+03	8.5E-04	8.5E-05
Antimony	0.33	3.7E-01	0.25	2.0E-02	0.080	9.3E-03	0.25	1.2E-04	1.6	1.0	2.0E-02	1.1E+00	6.7E+00	1.9E-02	2.9E-03
Arsenic	0.33	5.2E-01	0.25	2.7E-02	0.080	4.5E-03	0.25	5.8E-05	1.6	1.0	2.7E-02	6.9E+00	1.7E+01	4.0E-03	1.6E-03
Barium	0.33	3.9E+01	0.25	2.0E+00	0.080	6.1E-02	0.25	7.8E-04	1.6	1.0	2.0E+00	3.5E+01	6.9E+01	5.9E-02	2.9E-02
Beryllium	0.33	***1.2E-01***	0.25	6.5E-03	0.080	*2.0E-03*	0.25	2.6E-05	1.6	1.0	6.5E-03	1.5E+00	2.1E+01	4.3E-03	3.1E-04
Cadmium	0.33	***2.3E+00***	0.25	1.2E-01	0.080	*2.5E-03*	0.25	3.2E-05	1.6	1.0	1.2E-01	1.5E+00	2.1E+01	7.8E-02	5.6E-03
Chromium	0.33	***9.5E-02***	0.25	5.0E-03	0.080	*5.0E-03*	0.25	6.4E-05	1.6	1.0	5.1E-03	1.1E+00	6.7E+00	4.8E-03	7.6E-04
Cobalt	0.33	5.7E+00	0.25	3.0E-01	0.080	3.3E-03	0.25	4.2E-05	1.6	1.0	3.0E-01	8.9E-02	4.4E-01	3.4E+00	6.7E-01
Copper	0.33	6.3E+00	0.25	3.3E-01	0.080	8.9E-03	0.25	1.1E-04	1.6	1.0	3.3E-01	5.8E+01	7.6E+01	5.7E-03	4.4E-03
Lead	0.33	***2.3E-04***	0.25	1.2E-05	0.080	*2.5E-03*	0.25	3.2E-05	1.6	1.0	4.4E-05	6.3E+00	6.3E+01	6.9E-06	6.9E-07
Manganese	0.33	1.5E+02	0.25	7.7E+00	0.080	8.5E-02	0.25	1.1E-03	1.6	1.0	7.7E+00	1.8E+03	1.8E+04	4.2E-03	4.2E-04
Mercury	0.33	***1.1E+00***	0.25	5.9E-02	0.080	*1.0E-04*	0.25	1.3E-06	1.6	1.0	5.9E-02	6.8E-03	6.8E-02	8.7E+00	8.7E-01
Nickel	0.33	***1.6E+00***	0.25	8.2E-02	0.080	*2.0E-02*	0.25	2.6E-04	1.6	1.0	8.2E-02	8.9E+01	1.2E+02	9.3E-04	6.7E-04
Selenium	0.33	***6.5E-01***	0.25	3.4E-02	0.080	*5.0E-03*	0.25	6.4E-05	1.6	1.0	3.4E-02	5.3E-01	1.1E+00	6.4E-02	3.2E-02
Silver	0.33	***4.4E-01***	0.25	2.3E-02	0.080	*5.0E-03*	0.25	6.4E-05	1.6	1.0	2.3E-02	1.9E+02	1.9E+03	1.2E-04	1.2E-05
Thallium	0.33	***5.0E+01***	0.25	2.6E+00	0.080	*5.0E-03*	0.25	6.4E-05	1.6	1.0	2.6E+00	9.2E-01	9.2E+00	2.9E+00	2.9E-01
Vanadium	0.33	8.5E+00	0.25	4.4E-01	0.080	4.9E-03	0.25	6.2E-05	1.6	1.0	4.4E-01	1.2E+01	1.2E+02	3.7E-02	3.7E-03
Zinc	0.33	1.1E+01	0.25	5.7E-01	0.080	5.3E-03	0.25	6.7E-05	1.6	1.0	5.7E-01	1.9E+01	1.7E+02	3.0E-02	3.4E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1.
(c) - Metals were not analyzed for whole-body river fish tissue. Therefore, the surface water values were multiplied by their surface water-to-fish bioconcentration factors (BCFs) (USEPA, 1999). See Table III-B13.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values.
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-26
Hazard Quotients for Ingestion of Fish and Surface Water
Osprey
Adjacent River 2007
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Area Use Factor (a)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in River Surface Water (All sample locations except Plots 1 and 6) (mg/L)	Area Use Factor (a)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	2.0E+00	2.0E+01	6.8E-03	6.8E-04
1,2-Dichlorobenzene	0.33	2.3E-01	0.25	1.2E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.2E-02	8.3E-01	8.3E+00	1.4E-02	1.4E-03
1,3-Dichlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	8.3E-01	8.3E+00	1.6E-02	1.6E-03
1,4-Dichlorobenzene	0.33	2.4E-01	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	8.3E-01	8.3E+00	1.5E-02	1.5E-03
2,2'-oxybis (1-chloropropane)	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
2,4-Dichlorophenol	0.33	2.3E-01	0.25	1.2E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.2E-02	9.9E+01	9.9E+02	1.2E-04	1.2E-05
2,4-Dimethylphenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2,4-Dinitrophenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.4E-02***	0.25	3.1E-04	1.6	1.0	6.6E-02	9.9E+01	9.9E+02	6.7E-04	6.7E-05
2,4-Dinitrotoluene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2,6-Dinitrotoluene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	9.9E+01	9.9E+02	1.4E-04	1.4E-05
2-Chloronaphthalene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.1E-03	6.1E-04
2-Chlorophenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.0E-03	6.0E-04
2-Methylnaphthalene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.1E-03	6.1E-04
2-Methylphenol	0.33	2.2E-01	0.25	1.2E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.2E-02	1.9E+00	1.9E+01	6.1E-03	6.1E-04
2-Nitroaniline	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.4E-02***	0.25	3.1E-04	1.6	1.0	6.6E-02	7.5E+00	7.5E+01	8.8E-03	8.8E-04
2-Nitrophenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	8.7E-01	8.7E+00	1.5E-02	1.5E-03
3/4-Methylphenol	0.33	***1.0E+00***	0.25	5.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	5.3E-02	1.9E+00	1.9E+01	2.8E-02	2.8E-03
3-Nitroaniline	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.4E-02***	0.25	3.1E-04	1.6	1.0	6.6E-02	2.6E+00	2.6E+01	2.5E-02	2.5E-03
4,6-Dinitro-2-Methylphenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.4E-02***	0.25	3.1E-04	1.6	1.0	6.6E-02	9.4E-02	9.4E-01	7.0E-01	7.0E-02
4-Chloro-3-methylphenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.0E-03	6.0E-04
4-Chloroaniline	0.33	***5.0E-01***	0.25	2.6E-02	0.080	***9.6E-03***	0.25	1.2E-04	1.6	1.0	2.6E-02	1.7E+02	1.7E+03	1.5E-04	1.5E-05
4-Nitroaniline	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.4E-02***	0.25	3.1E-04	1.6	1.0	6.6E-02	3.9E+02	3.9E+03	1.7E-04	1.7E-05
4-Nitrophenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***2.4E-02***	0.25	3.1E-04	1.6	1.0	6.6E-02	8.7E-01	8.7E+00	7.6E-02	7.6E-03
Acenaphthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	2.0E+00	2.0E+01	6.7E-03	6.7E-04
Acenaphthylene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	2.4E+01	2.4E+02	5.6E-04	5.6E-05
Anthracene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	2.2E+00	2.2E+01	6.1E-03	6.1E-04
Benzo(a)anthracene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(a)pyrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(b)fluoranthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(ghi)perylene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Benzo(k)fluoranthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Bis(2-chloroethoxy)methane	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Bis(2-chloroethyl)ether	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Bis(2-ethylhexyl)phthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Butylbenzylphthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	1.5E+00	1.5E+01	9.1E-03	9.1E-04
Chrysene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Dibenzo(ah)anthracene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Dibenzofuran	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Diethyl phthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Dimethyl phthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Di-n-butylphthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	1.5E-01	1.5E+00	9.1E-02	9.1E-03
Di-n-octylphthalate	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	9.5E+00	9.5E+01	1.4E-03	1.4E-04
Fluoranthene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Fluorene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	1.3E+00	1.3E+01	1.1E-02	1.1E-03
Hexachlorobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	8.4E+00	8.4E+01	1.6E-03	1.6E-04
Hexachlorobutadiene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	4.9E+00	4.9E+01	2.7E-03	2.7E-04
Hexachlorocyclopentadiene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	4.9E+00	4.9E+01	2.7E-03	2.7E-04
Hexachloroethane	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	4.9E+00	4.9E+01	2.7E-03	2.7E-04
Indeno(1,2,3-cd)pyrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04
Naphthalene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	2.4E+01	2.4E+02	5.6E-04	5.6E-05
Nitrobenzene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	5.3E-01	5.3E+00	2.6E-02	2.6E-03
N-nitroso-di-n-propylamine	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	9.4E+00	9.4E+01	1.4E-03	1.4E-04
N-nitrosodiphenylamine	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	9.4E+00	9.4E+01	1.4E-03	1.4E-04
Pentachlorophenol	0.33	***1.3E+00***	0.25	6.6E-02	0.080	***1.2E-04***	0.25	1.6E-06	1.6	1.0	6.6E-02	1.3E+01	1.3E+02	4.9E-03	4.9E-04
Phenanthrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	2.4E+01	2.4E+02	5.6E-04	5.6E-05
Phenol	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	1.4E+00	1.4E+01	9.5E-03	9.5E-04
Pyrene	0.33	***2.6E-01***	0.25	1.3E-02	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	1.3E-02	7.1E+00	7.1E+01	1.9E-03	1.9E-04

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-26
Hazard Quotients for Ingestion of Fish and Surface Water
Osprey
Adjacent River 2007
Sauget, IL

Analyte	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in River Fish (mg/kg)	Area Use Factor (a)	Dose from River Fish (mg/kg/day)	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in River Surface Water (All sample locations except Plots 1 and 6) (mg/L)	Area Use Factor (a)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	0.33	1.1E-02	0.25	5.9E-04	0.080	***4.9E-05***	0.25	6.2E-07	1.6	1.0	5.9E-04	2.4E-03	2.4E-02	2.5E-01	2.5E-02
4,4'-DDE	0.33	1.8E-02	0.25	9.7E-04	0.080	***4.9E-05***	0.25	6.2E-07	1.6	1.0	9.7E-04	2.4E-03	2.4E-02	4.1E-01	4.1E-02
4,4'-DDT	0.33	1.3E-02	0.25	6.6E-04	0.080	***4.9E-05***	0.25	6.2E-07	1.6	1.0	6.6E-04	2.4E-03	2.4E-02	2.8E-01	2.8E-02
Aldrin	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***2.4E-05***	0.25	3.1E-07	1.6	1.0	6.6E-04	1.4E-01	1.4E+00	4.8E-03	4.8E-04
alpha-BHC	0.33	1.1E-02	0.25	6.0E-04	0.080	***2.4E-05***	0.25	3.1E-07	1.6	1.0	6.0E-04	3.7E-03	1.5E-01	1.6E-01	4.0E-03
alpha-Chlordane	0.33	1.2E-02	0.25	6.1E-04	0.080	***2.4E-05***	0.25	3.1E-07	1.6	1.0	6.1E-04	2.5E+02	1.2E+03	2.5E-06	5.0E-07
beta-BHC	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***2.4E-05***	0.25	3.1E-07	1.6	1.0	6.6E-04	3.7E-03	1.5E-01	1.8E-01	4.4E-03
delta-BHC	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***2.4E-05***	0.25	3.1E-07	1.6	1.0	6.6E-04	3.7E-03	1.5E-01	1.8E-01	4.4E-03
Dieldrin	0.33	1.5E-02	0.25	7.8E-04	0.080	***4.9E-05***	0.25	6.2E-07	1.6	1.0	7.8E-04	9.8E-02	9.8E-01	8.0E-03	8.0E-04
Endosulfan I	0.33	1.2E-02	0.25	6.1E-04	0.080	***2.4E-05***	0.25	3.1E-07	1.6	1.0	6.1E-04	1.3E+01	1.3E+02	4.6E-05	4.6E-06
Endosulfan II	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***4.9E-05***	0.25	6.2E-07	1.6	1.0	6.6E-04	1.3E+01	1.3E+02	5.0E-05	5.0E-06
Endosulfan Sulfate	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***4.9E-05***	0.25	6.2E-07	1.6	1.0	6.6E-04	1.3E+01	1.3E+02	5.0E-05	5.0E-06
Endrin	0.33	1.2E-02	0.25	6.4E-04	0.080	***4.9E-05***	0.25	6.2E-07	1.6	1.0	6.4E-04	1.7E-02	1.7E-01	3.8E-02	3.8E-03
Endrin Aldehyde	0.33	1.2E-02	0.25	6.1E-04	0.080	***4.9E-05***	0.25	6.2E-07	1.6	1.0	6.1E-04	1.7E-02	1.7E-01	3.6E-02	3.6E-03
Endrin Ketone	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***4.9E-05***	0.25	6.2E-07	1.6	1.0	6.6E-04	1.7E-02	1.7E-01	3.8E-02	3.8E-03
gamma-BHC (Lindane)	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***2.4E-05***	0.25	3.1E-07	1.6	1.0	6.6E-04	2.5E+00	2.5E+01	2.6E-04	2.6E-05
gamma-Chlordane	0.33	1.1E-02	0.25	5.8E-04	0.080	***2.4E-05***	0.25	3.1E-07	1.6	1.0	5.8E-04	2.5E+02	1.2E+03	2.3E-06	4.7E-07
Heptachlor	0.33	***1.3E-02***	0.25	6.6E-04	0.080	***2.4E-05***	0.25	3.1E-07	1.6	1.0	6.6E-04	1.0E-01	1.0E+00	6.3E-03	6.3E-04
Heptachlor Epoxide	0.33	1.1E-02	0.25	5.6E-04	0.080	***2.4E-05***	0.25	3.1E-07	1.6	1.0	5.6E-04	1.0E-01	1.0E+00	5.4E-03	5.4E-04
Methoxychlor	0.33	***5.0E-02***	0.25	2.6E-03	0.080	***2.4E-04***	0.25	3.1E-06	1.6	1.0	2.6E-03	1.4E+02	1.4E+03	1.9E-05	1.9E-06
Toxaphene	0.33	***4.3E-01***	0.25	2.2E-02	0.080	***2.4E-03***	0.25	3.1E-05	1.6	1.0	2.2E-02	2.0E+00	9.8E+00	1.1E-02	2.3E-03
Herbicides															
2,4-D	0.33	***4.2E-03***	0.25	2.2E-04	0.080	***2.5E-04***	0.25	3.1E-06	1.6	1.0	2.2E-04	5.3E+00	5.3E+01	4.2E-05	4.2E-06
2,4-DB	0.33	***4.2E-03***	0.25	2.2E-04	0.080	***2.5E-04***	0.25	3.1E-06	1.6	1.0	2.2E-04	5.3E+00	5.3E+01	4.2E-05	4.2E-06
2,4,5-T	0.33	5.7E-03	0.25	3.0E-04	0.080	***2.5E-04***	0.25	3.1E-06	1.6	1.0	3.0E-04	7.7E+00	7.7E+01	4.0E-05	4.0E-06
2,4,5-TP (Silvex)	0.33	4.9E-03	0.25	2.6E-04	0.080	***2.5E-04***	0.25	3.1E-06	1.6	1.0	2.6E-04	7.7E+00	7.7E+01	3.4E-05	3.4E-06
Dalapon	0.33	***1.0E+00***	0.25	5.3E-02	0.080	***4.9E-03***	0.25	6.3E-05	1.6	1.0	5.3E-02	1.5E+01	1.5E+02	3.4E-03	3.4E-04
Dicamba	0.33	***1.0E-02***	0.25	5.3E-04	0.080	***2.5E-04***	0.25	3.1E-06	1.6	1.0	5.3E-04	1.9E+01	1.9E+02	2.8E-05	2.8E-06
Dinoseb	0.33	***5.0E-02***	0.25	2.6E-03	0.080	***4.8E-03***	0.25	6.1E-05	1.6	1.0	2.7E-03	1.1E-01	1.1E+00	2.5E-02	2.5E-03
MCPA	0.33	***1.0E+00***	0.25	5.3E-02	0.080	***6.0E-02***	0.25	7.7E-04	1.6	1.0	5.3E-02	5.8E+00	5.8E+01	9.2E-03	9.2E-04
MCPP	0.33	2.3E+00	0.25	1.2E-01	0.080	***6.0E-02***	0.25	7.7E-04	1.6	1.0	1.2E-01	1.1E+01	1.1E+02	1.1E-02	1.1E-03
PCBs															
Total PCBs	0.33	***2.5E-02***	0.25	1.3E-03	0.080	NA	0.25	NA	1.6	1.0	1.3E-03	7.7E+00	7.7E+01	1.7E-04	1.7E-05
Dioxins/Furans															
TEQ	0.33	2.8E-06	0.25	1.5E-07	0.080	NA	0.25	NA	1.6	1.0	1.5E-07	1.5E-06	1.5E-05	9.5E-02	9.5E-03
Metals (c)															
Aluminum	0.33	2.3E-01	0.25	1.2E-02	0.080	8.6E-02	0.25	1.1E-03	1.6	1.0	1.3E-02	1.5E+02	1.5E+03	9.1E-05	9.0E-06
Antimony	0.33	***4.0E-01***	0.25	2.1E-02	0.080	***1.0E-02***	0.25	1.3E-04	1.6	1.0	2.1E-02	1.1E+00	6.7E+00	2.0E-02	3.2E-03
Arsenic	0.33	***5.7E-01***	0.25	3.0E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	3.0E-02	6.9E+00	1.7E+01	4.4E-03	1.8E-03
Barium	0.33	4.1E+01	0.25	2.2E+00	0.080	6.5E-02	0.25	8.3E-04	1.6	1.0	2.2E+00	3.5E+01	6.9E+01	6.3E-02	3.1E-02
Beryllium	0.33	***1.2E-01***	0.25	6.5E-03	0.080	***2.0E-03***	0.25	2.6E-05	1.6	1.0	6.5E-03	1.5E+00	2.1E+01	4.3E-03	3.1E-04
Cadmium	0.33	***2.3E+00***	0.25	1.2E-01	0.080	***2.5E-03***	0.25	3.2E-05	1.6	1.0	1.2E-01	1.5E+00	2.1E+01	7.8E-02	5.6E-03
Chromium	0.33	***9.5E-02***	0.25	5.0E-03	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	5.1E-03	1.1E+00	6.7E+00	4.8E-03	7.6E-04
Cobalt	0.33	***8.7E+00***	0.25	4.6E-01	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	4.6E-01	8.9E-02	4.4E-01	5.1E+00	1.0E+00
Copper	0.33	***1.3E+00***	0.25	6.9E-02	0.080	***1.9E-03***	0.25	2.4E-05	1.6	1.0	6.9E-02	5.8E+01	7.6E+01	1.2E-03	9.1E-04
Lead	0.33	***2.3E-04***	0.25	1.2E-05	0.080	***2.5E-03***	0.25	3.2E-05	1.6	1.0	4.4E-05	6.3E+00	6.3E+01	6.9E-06	6.9E-07
Manganese	0.33	***8.7E+00***	0.25	4.6E-01	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	4.6E-01	1.8E+03	1.8E+04	2.5E-04	2.5E-05
Mercury	0.33	***1.1E+00***	0.25	5.9E-02	0.080	***1.0E-04***	0.25	1.3E-06	1.6	1.0	5.9E-02	6.8E-03	6.8E-02	8.7E+00	8.7E-01
Nickel	0.33	1.0E+00	0.25	5.3E-02	0.080	1.3E-02	0.25	1.7E-04	1.6	1.0	5.3E-02	8.9E+01	1.2E+02	6.0E-04	4.3E-04
Selenium	0.33	***6.5E-01***	0.25	3.4E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	3.4E-02	5.3E-01	1.1E+00	6.4E-02	3.2E-02
Silver	0.33	***4.4E-01***	0.25	2.3E-02	0.080	***5.0E-03***	0.25	6.4E-05	1.6	1.0	2.3E-02	1.9E+02	1.9E+03	1.2E-04	1.2E-05
Thallium	0.33	***1.3E+02***	0.25	6.6E+00	0.080	***1.3E-02***	0.25	1.6E-04	1.6	1.0	6.6E+00	9.2E-01	9.2E+00	7.1E+00	7.1E-01
Vanadium	0.33	4.0E+00	0.25	2.1E-01	0.080	2.3E-03	0.25	2.9E-05	1.6	1.0	2.1E-01	1.2E+01	1.2E+02	1.7E-02	1.7E-03
Zinc	0.33	***6.1E+00***	0.25	3.2E-01	0.080	***3.0E-03***	0.25	3.8E-05	1.6	1.0	3.2E-01	1.9E+01	1.7E+02	1.7E-02	1.9E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1.
(c) - Metals were not analyzed for whole-body river fish tissue. Therefore, the surface water values were multiplied by their surface water-to-fish bioconcentration factors (BCFs) (USEPA, 1999). See Table III-B13.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NA - Not analyzed
NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values.
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-27
Hazard Quotients for Ingestion of Plants
Prairie Vole
Off-Site Areas (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	6.2E+01	2.9E-03	8.1E-04
1,2-Dichlorobenzene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.4E+03	5.1E-04	3.6E-05
1,3-Dichlorobenzene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.4E+03	5.1E-04	3.6E-05
1,4-Dichlorobenzene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.7E+02	5.1E-04	2.9E-04
2,2'-Oxybis(1-Chloropropane)	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
2,4,5-Trichlorophenol	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	3.5E+01	4.3E-03	1.4E-03
2,4,6-Trichlorophenol	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.8E+02	3.5E+01	8.7E-05	1.4E-03
2,4-Dichlorophenol	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.5E-01	3.5E+00	1.4E-01	1.4E-02
2,4-Dinitrophenol	***9.9E-01***	0.00012	1.0	2.8E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	1.6E-03	1.6E-02	1.6E+02	1.6E+01
2,4-Dinitrotoluene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.9E-01	2.2E+00	1.7E-01	2.3E-02
2,6-Dinitrotoluene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	8.1E-01	8.1E+00	6.2E-02	6.2E-03
2-Chloronaphthalene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.5E+01	6.0E+01	2.0E-03	8.4E-04
2-Chlorophenol	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.8E+01	5.8E+00	8.7E-04	8.7E-03
2-Methylnaphthalene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.8E+03	2.8E+04	1.8E-05	1.8E-06
2-Methylphenol (o-Cresol)	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
2-Nitroaniline	***9.9E-01***	0.00012	1.0	2.8E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
2-Nitrophenol	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.9E+00	8.1E+00	1.7E-02	6.2E-03
3,3'-Dichlorobenzidine	***3.8E-01***	0.00012	1.0	1.1E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.5E+01	5.1E+02	6.8E-03	2.0E-04
3/4-Methylphenol (m&p-Cresol)	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
3-Nitroaniline	***9.9E-01***	0.00012	1.0	2.8E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4,6-Dinitro-2-methylphenol	***9.9E-01***	0.00012	1.0	2.8E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E-01	5.3E+00	8.9E-01	4.9E-02
4-Bromophenyl Phenyl Ether	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+00	9.2E+00	4.3E-02	5.4E-03
4-Chloro-3-methylphenol	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.3E+02	1.3E+03	3.9E-04	3.9E-05
4-Chloroaniline	***3.8E-01***	0.00012	1.0	1.1E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.4E+00	1.4E+01	7.0E-02	7.0E-03
4-Chlorophenyl Phenyl Ether	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+00	9.2E+00	4.3E-02	5.4E-03
4-Nitroaniline	***9.9E-01***	0.00012	1.0	2.8E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4-Nitrophenol	***9.9E-01***	0.00012	1.0	2.8E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E+00	8.1E+00	8.9E-02	3.2E-02
Acenaphthene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Acenaphthylene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Anthracene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+02	1.0E+03	5.0E-04	5.0E-05
Benzo(a)anthracene	7.0E-02	0.00012	1.0	2.0E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(a)pyrene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(b)fluoranthene	1.5E-01	0.00012	1.0	4.4E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(g,h,i)perylene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(k)fluoranthene	7.3E-02	0.00012	1.0	2.1E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
bis(2-Chloroethoxy)methane	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
bis(2-Chloroethyl)ether	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
bis(2-Ethylhexyl)phthalate	2.2E-01	0.00012	1.0	6.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.9E+01	1.9E+02	2.7E-03	2.7E-04
Butyl Benzyl Phthalate	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.8E+01	5.4E+01	2.7E-03	9.2E-04
Carbazole	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.0E+00	3.0E+01	1.7E-02	1.7E-03
Chrysene	7.7E-02	0.00012	1.0	2.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Dibenzo(a,h)anthracene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Dibenzofuran	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.5E-02	1.5E-01	3.3E+00	3.3E-01
Diethyl Phthalate	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.5E+03	4.5E+04	1.1E-05	1.1E-06
Dimethyl Phthalate	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.6E+03	4.6E+04	1.1E-05	1.1E-06
Di-n-butylphthalate	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.6E+02	1.9E+03	9.0E-05	2.7E-05
Di-n-octylphthalate	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.5E+02	1.8E+03	9.1E-05	2.7E-05
Fluoranthene	1.2E-01	0.00012	1.0	3.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	2.5E+01	4.0E-03	2.0E-03
Fluorene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	2.5E+01	4.0E-03	2.0E-03
Hexachlorobenzene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.2E-02	3.4E-01	5.4E-01	1.5E-01
Hexachlorobutadiene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.3E-01	2.3E-01	2.2E-01	2.2E-01
Hexachlorocyclopentadiene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	6.9E-01	1.3E+00	7.2E-02	3.9E-02
Hexachloroethane	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E-01	1.7E+00	4.3E-01	2.9E-02
Indeno(1,2,3-cd)pyrene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Isophorone	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.2E+01	2.1E+02	2.3E-03	2.4E-04
Naphthalene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	8.2E+00	1.6E+01	6.1E-03	3.0E-03
Nitrobenzene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.6E-02	4.6E-01	1.1E+00	1.1E-01
N-Nitroso-di-n-propylamine	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E-02	1.0E-01	5.0E+00	5.0E-01
N-Nitrosodiphenylamine	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.3E+02	5.8E+01	2.2E-04	8.7E-04
Pentachlorophenol	4.9E-03	0.00012	1.0	1.4E-05	0.0042	***8.7E-01***	1.0	8.7E-02	0.0416	1.0	8.7E-02	3.7E-01	3.7E+00	2.3E-01	2.3E-02
Phenanthrene	7.7E-02	0.00012	1.0	2.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.8E-03	1.4E-03
Phenol	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	6.9E+01	1.4E+02	7.2E-04	3.6E-04
Pyrene	1.2E-01	0.00012	1.0	3.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	7.5E+00	1.2E+01	6.7E-03	4.0E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workpla
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-27
Hazard Quotients for Ingestion of Plants
Prairie Vole
Off-Site Areas (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	3.2E-03	0.00012	1.0	9.2E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	4.2E-01	2.1E+00	1.2E-03	2.4E-04
4,4'-DDE	7.6E-03	0.00012	1.0	2.2E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.2E-04	4.2E-01	2.1E+00	1.2E-03	2.5E-04
4,4'-DDT	2.2E-02	0.00012	1.0	6.4E-05	0.0042	3.0E-03	1.0	3.0E-04	0.0416	1.0	3.6E-04	4.2E-01	2.1E+00	8.6E-04	1.7E-04
Aldrin	***9.9E-04***	0.00012	1.0	2.8E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.8E-01	1.4E+00	9.2E-04	1.8E-04
alpha-BHC	***9.9E-04***	0.00012	1.0	2.8E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.3E+00	4.5E+00	1.1E-04	5.7E-05
alpha-Chlordane	***9.9E-04***	0.00012	1.0	2.8E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	4.6E+00	9.1E+00	5.6E-05	2.8E-05
beta-BHC	***9.9E-04***	0.00012	1.0	2.8E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	5.7E-01	2.8E+00	4.5E-04	9.1E-05
delta-BHC	***9.9E-04***	0.00012	1.0	2.8E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.3E+00	4.5E+00	1.1E-04	5.7E-05
Dieldrin	4.6E-03	0.00012	1.0	1.3E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.1E-04	1.8E-02	1.8E-01	2.9E-02	2.9E-03
Endosulfan I	1.1E-03	0.00012	1.0	3.1E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	4.3E-01	4.3E+00	6.0E-04	6.0E-05
Endosulfan II	1.6E-03	0.00012	1.0	4.6E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	4.3E-01	4.3E+00	1.2E-03	1.2E-04
Endosulfan Sulfate	1.4E-03	0.00012	1.0	4.0E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	4.3E-01	4.3E+00	1.2E-03	1.2E-04
Endrin	***1.9E-03***	0.00012	1.0	5.5E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	9.2E-02	9.2E-01	5.4E-03	5.4E-04
Endrin Aldehyde	2.2E-03	0.00012	1.0	6.3E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	9.2E-02	9.2E-01	5.5E-03	5.5E-04
Endrin Ketone	***1.9E-03***	0.00012	1.0	5.5E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	9.2E-02	9.2E-01	5.4E-03	5.4E-04
gamma-BHC (Lindane)	***9.9E-04***	0.00012	1.0	2.8E-06	0.0042	2.2E-03	1.0	2.2E-04	0.0416	1.0	2.2E-04	2.0E+01	2.0E+02	1.1E-05	1.1E-06
gamma-Chlordane	***9.9E-04***	0.00012	1.0	2.8E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	4.6E+00	9.1E+00	5.6E-05	2.8E-05
Heptachlor	***9.9E-04***	0.00012	1.0	2.8E-06	0.0042	2.2E-03	1.0	2.2E-04	0.0416	1.0	2.3E-04	7.4E-02	7.4E-01	3.0E-03	3.0E-04
Heptachlor Epoxide	1.3E-03	0.00012	1.0	3.8E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	1.0E-03	7.5E-03	2.5E-01	3.5E-02
Methoxychlor	8.2E-03	0.00012	1.0	2.4E-05	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	2.6E-03	2.3E+00	4.7E+00	1.1E-03	5.5E-04
Toxaphene	***9.9E-02***	0.00012	1.0	2.8E-04	0.0042	***2.6E-01***	1.0	2.6E-02	0.0416	1.0	2.6E-02	7.9E+00	7.9E+01	3.2E-03	3.2E-04
Herbicides															
2,4-D	5.1E-03	0.00012	1.0	1.5E-05	0.0042	4.5E-01	1.0	4.5E-02	0.0416	1.0	4.5E-02	1.6E+00	8.1E+00	2.8E-02	5.5E-03
2,4-DB	***4.8E-03***	0.00012	1.0	1.4E-05	0.0042	5.7E-01	1.0	5.7E-02	0.0416	1.0	5.7E-02	2.6E+00	8.3E+00	2.2E-02	7.0E-03
2,4,5-T	***4.8E-03***	0.00012	1.0	1.4E-05	0.0042	4.3E-01	1.0	4.3E-02	0.0416	1.0	4.3E-02	3.5E+00	1.2E+01	1.2E-02	3.7E-03
2,4,5-TP (Silvex)	***4.8E-03***	0.00012	1.0	1.4E-05	0.0042	***4.3E-01***	1.0	4.3E-02	0.0416	1.0	4.3E-02	1.1E+00	3.6E+00	4.0E-02	1.2E-02
Dalapon	***1.2E+00***	0.00012	1.0	3.3E-03	0.0042	***1.0E+02***	1.0	1.0E+01	0.0416	1.0	1.0E+01	9.8E+00	3.3E+01	1.0E+00	3.1E-01
Dicamba	***1.2E-02***	0.00012	1.0	3.3E-05	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	3.7E+00	1.2E+01	2.7E-02	8.2E-03
Dichlorprop	8.4E-02	0.00012	1.0	2.4E-04	0.0042	***5.1E+00***	1.0	5.1E-01	0.0416	1.0	5.1E-01	2.0E-01	2.0E+00	2.6E+00	2.6E-01
Dinoseb	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E-01	1.2E+00	4.3E-01	4.3E-02
MCPA	***1.2E+00***	0.00012	1.0	3.3E-03	0.0042	***1.0E+02***	1.0	1.0E+01	0.0416	1.0	1.0E+01	2.2E-01	1.1E+00	4.7E+01	9.5E+00
MCPP	2.8E+00	0.00012	1.0	8.0E-03	0.0042	***1.0E+02***	1.0	1.0E+01	0.0416	1.0	1.0E+01	3.5E-01	1.0E+00	2.9E+01	9.8E+00
PCBs															
Total PCBs	1.1E-01	0.00012	1.0	3.1E-04	0.0042	***2.5E-02***	1.0	2.5E-03	0.0416	1.0	2.8E-03	1.2E-01	1.2E+00	2.4E-02	2.4E-03
Dioxins/Furans															
TEQ	1.3E-04	0.00012	1.0	3.8E-07	0.0042	3.5E-07	1.0	3.5E-08	0.0416	1.0	4.2E-07	1.2E-06	1.2E-05	3.6E-01	3.6E-02
Metals*															
Aluminum	6.7E+03	0.00012	1.0	1.9E+01	0.0042	5.2E+01	1.0	5.2E+00	0.0416	1.0	2.4E+01	1.9E+00	1.9E+01	1.3E+01	1.3E+00
Antimony	1.3E+00	0.00012	1.0	3.9E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.2E-01	1.2E+00	8.3E-01	8.3E-02
Arsenic	7.4E+00	0.00012	1.0	2.1E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.1E-02	1.3E-01	1.3E+00	5.7E-01	5.7E-02
Barium	1.8E+02	0.00012	1.0	5.3E-01	0.0042	1.1E+01	1.0	1.1E+00	0.0416	1.0	1.6E+00	9.4E+00	3.7E+01	1.7E-01	4.4E-02
Beryllium	5.0E-01	0.00012	1.0	1.4E-03	0.0042	***2.0E-01***	1.0	2.0E-02	0.0416	1.0	2.1E-02	7.6E-01	7.6E+00	2.8E-02	2.8E-03
Cadmium	2.0E+00	0.00012	1.0	5.8E-03	0.0042	3.1E-01	1.0	3.1E-02	0.0416	1.0	3.6E-02	3.9E+00	3.9E+01	9.4E-03	9.4E-04
Chromium	1.2E+01	0.00012	1.0	3.3E-02	0.0042	3.3E-01	1.0	3.3E-02	0.0416	1.0	6.6E-02	3.8E+00	1.5E+01	1.7E-02	4.3E-03
Cobalt	5.4E+00	0.00012	1.0	1.6E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.6E-02	5.8E-02	5.8E-01	1.1E+00	1.1E-01
Copper	5.9E+01	0.00012	1.0	1.7E-01	0.0042	4.0E+00	1.0	4.0E-01	0.0416	1.0	5.7E-01	1.4E+01	1.9E+01	3.9E-02	3.0E-02
Lead	7.9E+01	0.00012	1.0	2.3E-01	0.0042	9.3E-01	1.0	9.3E-02	0.0416	1.0	3.2E-01	9.2E+00	9.2E+01	3.5E-02	3.5E-03
Manganese	2.8E+02	0.00012	1.0	8.2E-01	0.0042	1.2E+01	1.0	1.2E+00	0.0416	1.0	2.0E+00	1.0E+02	3.3E+02	2.0E-02	6.1E-03
Mercury	8.5E-02	0.00012	1.0	2.5E-04	0.0042	4.0E-01	1.0	4.0E-02	0.0416	1.0	4.0E-02	7.6E-02	3.8E-01	5.3E-01	1.1E-01
Nickel	1.8E+01	0.00012	1.0	5.1E-02	0.0042	***2.0E+00***	1.0	2.0E-01	0.0416	1.0	2.5E-01	4.6E+01	9.2E+01	5.4E-03	2.7E-03
Selenium	5.6E-01	0.00012	1.0	1.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.9E-01	3.2E-01	2.7E-01	1.6E-01
Silver	5.7E-01	0.00012	1.0	1.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.8E-01	1.8E+00	2.9E-01	2.9E-02
Thallium	***5.4E-01***	0.00012	1.0	1.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E-02	1.2E-01	4.4E+00	4.4E-01
Vanadium	2.2E+01	0.00012	1.0	6.2E-02	0.0042	4.9E-01	1.0	4.9E-02	0.0416	1.0	1.1E-01	1.3E-01	1.3E+00	8.6E-01	8.6E-02
Zinc	2.4E+02	0.00012	1.0	7.0E-01	0.0042	3.7E+01	1.0	3.7E+00	0.0416	1.0	4.4E+00	2.3E+02	4.6E+02	1.9E-02	9.7E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-28
Hazard Quotients for Ingestion of Plants
Prairie Vole
Off-Site Areas (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	6.2E+01	2.9E-03	8.1E-04
1,2-Dichlorobenzene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.4E+03	5.1E-04	3.6E-05
1,3-Dichlorobenzene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.4E+03	5.1E-04	3.6E-05
1,4-Dichlorobenzene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.7E+02	5.1E-04	2.9E-04
2,2'-Oxybis(1-Chloropropane)	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
2,4,5-Trichlorophenol	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	3.5E+01	4.3E-03	1.4E-03
2,4,6-Trichlorophenol	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.8E+02	3.5E+01	8.7E-05	1.4E-03
2,4-Dichlorophenol	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.5E-01	3.5E+00	1.4E-01	1.4E-02
2,4-Dinitrophenol	***1.1E+00***	0.00012	1.0	3.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	1.6E-03	1.6E-02	1.6E+02	1.6E+01
2,4-Dinitrotoluene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.9E-01	2.2E+00	1.7E-01	2.3E-02
2,6-Dinitrotoluene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	8.1E-01	8.1E+00	6.2E-02	6.2E-03
2-Chloronaphthalene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.5E+01	6.0E+01	2.0E-03	8.4E-04
2-Chlorophenol	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.8E+01	5.8E+00	8.7E-04	8.7E-03
2-Methylnaphthalene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.8E+03	2.8E+04	1.8E-05	1.8E-06
2-Methylphenol (o-Cresol)	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
2-Nitroaniline	***1.1E+00***	0.00012	1.0	3.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
2-Nitrophenol	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.9E+00	8.1E+00	1.7E-02	6.2E-03
3,3'-Dichlorobenzidine	***4.0E-01***	0.00012	1.0	1.2E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.5E+01	5.1E+02	6.8E-03	2.0E-04
3/4-Methylphenol (m&p-Cresol)	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
3-Nitroaniline	***1.1E+00***	0.00012	1.0	3.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4,6-Dinitro-2-methylphenol	***1.1E+00***	0.00012	1.0	3.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E-01	5.3E+00	8.9E-01	4.9E-02
4-Bromophenyl Phenyl Ether	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+00	9.2E+00	4.3E-02	5.4E-03
4-Chloro-3-methylphenol	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.3E+02	1.3E+03	3.9E-04	3.9E-05
4-Chloroaniline	***4.0E-01***	0.00012	1.0	1.2E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.4E+00	1.4E+01	7.0E-02	7.0E-03
4-Chlorophenyl Phenyl Ether	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+00	9.2E+00	4.3E-02	5.4E-03
4-Nitroaniline	***1.1E+00***	0.00012	1.0	3.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4-Nitrophenol	***1.1E+00***	0.00012	1.0	3.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E+00	8.1E+00	8.9E-02	3.2E-02
Acenaphthene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Acenaphthylene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Anthracene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+02	1.0E+03	5.0E-04	5.0E-05
Benzo(a)anthracene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(a)pyrene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(b)fluoranthene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(g,h,i)perylene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(k)fluoranthene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
bis(2-Chloroethoxy)methane	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
bis(2-Chloroethyl)ether	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
bis(2-Ethylhexyl)phthalate	3.0E-01	0.00012	1.0	8.7E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.9E+01	1.9E+02	2.7E-03	2.7E-04
Butyl Benzyl Phthalate	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.8E+01	5.4E+01	2.7E-03	9.2E-04
Carbazole	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.0E+00	3.0E+01	1.7E-02	1.7E-03
Chrysene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Dibenzo(a,h)anthracene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Dibenzofuran	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.5E-02	1.5E-01	3.3E+00	3.3E-01
Diethyl Phthalate	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.5E+03	4.5E+04	1.1E-05	1.1E-06
Dimethyl Phthalate	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.6E+03	4.6E+04	1.1E-05	1.1E-06
Di-n-butylphthalate	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.6E+02	1.9E+03	9.0E-05	2.7E-05
Di-n-octylphthalate	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.5E+02	1.8E+03	9.1E-05	2.7E-05
Fluoranthene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	2.5E+01	4.0E-03	2.0E-03
Fluorene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	2.5E+01	4.0E-03	2.0E-03
Hexachlorobenzene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.2E-02	3.4E-01	5.4E-01	1.5E-01
Hexachlorobutadiene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.3E-01	2.3E-01	2.2E-01	2.2E-01
Hexachlorocyclopentadiene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	6.9E-01	1.3E+00	7.2E-02	3.9E-02
Hexachloroethane	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E-01	1.7E+00	4.3E-01	2.9E-02
Indeno(1,2,3-cd)pyrene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Isophorone	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.2E+01	2.1E+02	2.3E-03	2.4E-04
Naphthalene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	8.2E+00	1.6E+01	6.1E-03	3.1E-03
Nitrobenzene	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.6E-02	4.6E-01	1.1E+00	1.1E-01
N-Nitroso-di-n-propylamine	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E-02	1.0E-01	5.0E+00	5.0E-01
N-Nitrosodiphenylamine	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.3E+02	5.8E+01	2.2E-04	8.7E-04
Pentachlorophenol	***1.0E-02***	0.00012	1.0	2.9E-05	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	3.7E-01	3.7E+00	6.8E-01	6.8E-02
Phenanthrene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Phenol	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	6.9E+01	1.4E+02	7.2E-04	3.6E-04
Pyrene	***1.9E-01***	0.00012	1.0	5.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	7.5E+00	1.2E+01	6.7E-03	4.0E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workpla
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-28
Hazard Quotients for Ingestion of Plants
Prairie Vole
Off-Site Areas (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	6.6E-03	0.00012	1.0	1.9E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.1E-04	4.2E-01	2.1E+00	1.2E-03	2.5E-04
4,4'-DDE	1.6E-02	0.00012	1.0	4.6E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.4E-04	4.2E-01	2.1E+00	1.3E-03	2.6E-04
4,4'-DDT	4.6E-02	0.00012	1.0	1.3E-04	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	6.3E-04	4.2E-01	2.1E+00	1.5E-03	3.0E-04
Aldrin	***1.1E-03***	0.00012	1.0	3.0E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.8E-01	1.4E+00	9.2E-04	1.8E-04
alpha-BHC	***1.1E-03***	0.00012	1.0	3.0E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.3E+00	4.5E+00	1.1E-04	5.7E-05
alpha-Chlordane	***1.1E-03***	0.00012	1.0	3.0E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	4.6E+00	9.1E+00	5.7E-05	2.8E-05
beta-BHC	***1.1E-03***	0.00012	1.0	3.0E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	5.7E-01	2.8E+00	4.5E-04	9.1E-05
delta-BHC	***1.1E-03***	0.00012	1.0	3.0E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.3E+00	4.5E+00	1.1E-04	5.7E-05
Dieldrin	9.6E-03	0.00012	1.0	2.8E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.2E-04	1.8E-02	1.8E-01	3.0E-02	3.0E-03
Endosulfan I	2.1E-03	0.00012	1.0	6.1E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	4.3E-01	4.3E+00	6.1E-04	6.1E-05
Endosulfan II	***2.0E-03***	0.00012	1.0	5.8E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	4.3E-01	4.3E+00	1.2E-03	1.2E-04
Endosulfan Sulfate	***1.9E-03***	0.00012	1.0	5.5E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	4.3E-01	4.3E+00	1.2E-03	1.2E-04
Endrin	***2.0E-03***	0.00012	1.0	5.8E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	9.2E-02	9.2E-01	5.5E-03	5.5E-04
Endrin Aldehyde	3.0E-03	0.00012	1.0	8.7E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	9.2E-02	9.2E-01	5.5E-03	5.5E-04
Endrin Ketone	***2.0E-03***	0.00012	1.0	5.8E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	9.2E-02	9.2E-01	5.5E-03	5.5E-04
gamma-BHC (Lindane)	***1.1E-03***	0.00012	1.0	3.0E-06	0.0042	3.3E-03	1.0	3.3E-04	0.0416	1.0	3.3E-04	2.0E+01	2.0E+02	1.6E-05	1.6E-06
gamma-Chlordane	***1.1E-03***	0.00012	1.0	3.0E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	4.6E+00	9.1E+00	5.7E-05	2.8E-05
Heptachlor	***1.1E-03***	0.00012	1.0	3.0E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	7.4E-02	7.4E-01	3.5E-03	3.5E-04
Heptachlor Epoxide	2.3E-03	0.00012	1.0	6.6E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	1.0E-03	7.5E-03	2.6E-01	3.5E-02
Methoxychlor	***1.1E-02***	0.00012	1.0	3.0E-05	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	2.6E-03	2.3E+00	4.7E+00	1.1E-03	5.5E-04
Toxaphene	***1.1E-01***	0.00012	1.0	3.0E-04	0.0042	***2.6E-01***	1.0	2.6E-02	0.0416	1.0	2.6E-02	7.9E+00	7.9E+01	3.2E-03	3.2E-04
Herbicides															
2,4-D	5.8E-03	0.00012	1.0	1.7E-05	0.0042	***1.3E+00***	1.0	1.3E-01	0.0416	1.0	1.3E-01	1.6E+00	8.1E+00	7.7E-02	1.5E-02
2,4-DB	***5.0E-03***	0.00012	1.0	1.4E-05	0.0042	***1.3E+00***	1.0	1.3E-01	0.0416	1.0	1.3E-01	2.6E+00	8.3E+00	4.7E-02	1.5E-02
2,4,5-T	***5.0E-03***	0.00012	1.0	1.4E-05	0.0042	***1.3E+00***	1.0	1.3E-01	0.0416	1.0	1.3E-01	3.5E+00	1.2E+01	3.6E-02	1.1E-02
2,4,5-TP (Silvex)	***5.0E-03***	0.00012	1.0	1.4E-05	0.0042	***1.3E+00***	1.0	1.3E-01	0.0416	1.0	1.3E-01	1.1E+00	3.6E+00	1.2E-01	3.5E-02
Dalapon	***1.2E+00***	0.00012	1.0	3.5E-03	0.0042	***3.0E+02***	1.0	3.0E+01	0.0416	1.0	3.0E+01	9.8E+00	3.3E+01	3.1E+00	9.0E-01
Dicamba	***1.2E-02***	0.00012	1.0	3.5E-05	0.0042	***3.0E+00***	1.0	3.0E-01	0.0416	1.0	3.0E-01	3.7E+00	1.2E+01	8.0E-02	2.4E-02
Dichlorprop	1.6E-01	0.00012	1.0	4.6E-04	0.0042	***1.5E+01***	1.0	1.5E+00	0.0416	1.0	1.5E+00	2.0E-01	2.0E+00	7.5E+00	7.5E-01
Dinoseb	***2.0E-01***	0.00012	1.0	5.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E-01	1.2E+00	4.3E-01	4.3E-02
MCPA	***1.2E+00***	0.00012	1.0	3.5E-03	0.0042	***3.0E+02***	1.0	3.0E+01	0.0416	1.0	3.0E+01	2.2E-01	1.1E+00	1.4E+02	2.8E+01
MCPP	6.6E+00	0.00012	1.0	1.9E-02	0.0042	***3.0E+02***	1.0	3.0E+01	0.0416	1.0	3.0E+01	3.5E-01	1.0E+00	8.7E+01	2.9E+01
PCBs															
Total PCBs	1.7E-01	0.00012	1.0	5.0E-04	0.0042	***2.5E-02***	1.0	2.5E-03	0.0416	1.0	3.0E-03	1.2E-01	1.2E+00	2.6E-02	2.6E-03
Dioxins/Furans															
TEQ	2.3E-04	0.00012	1.0	6.6E-07	0.0042	3.9E-07	1.0	3.9E-08	0.0416	1.0	7.0E-07	1.2E-06	1.2E-05	6.0E-01	6.0E-02
Metals*															
Aluminum	8.2E+03	0.00012	1.0	2.4E+01	0.0042	1.3E+02	1.0	1.3E+01	0.0416	1.0	3.7E+01	1.9E+00	1.9E+01	1.9E+01	1.9E+00
Antimony	1.9E+00	0.00012	1.0	5.5E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.1E-01	1.2E-01	1.2E+00	8.5E-01	8.5E-02
Arsenic	9.3E+00	0.00012	1.0	2.7E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.7E-02	1.3E-01	1.3E+00	6.1E-01	6.1E-02
Barium	2.0E+02	0.00012	1.0	5.8E-01	0.0042	1.5E+01	1.0	1.5E+00	0.0416	1.0	2.1E+00	9.4E+00	3.7E+01	2.2E-01	5.7E-02
Beryllium	6.0E-01	0.00012	1.0	1.7E-03	0.0042	***2.0E-01***	1.0	2.0E-02	0.0416	1.0	2.2E-02	7.6E-01	7.6E+00	2.8E-02	2.8E-03
Cadmium	4.5E+00	0.00012	1.0	1.3E-02	0.0042	5.5E-01	1.0	5.5E-02	0.0416	1.0	6.8E-02	3.9E+00	3.9E+01	1.8E-02	1.8E-03
Chromium	1.3E+01	0.00012	1.0	3.8E-02	0.0042	5.1E-01	1.0	5.1E-02	0.0416	1.0	8.9E-02	3.8E+00	1.5E+01	2.3E-02	5.8E-03
Cobalt	6.6E+00	0.00012	1.0	1.9E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.9E-02	5.8E-02	5.8E-01	1.2E+00	1.2E-01
Copper	1.5E+02	0.00012	1.0	4.3E-01	0.0042	4.6E+00	1.0	4.6E-01	0.0416	1.0	8.9E-01	1.4E+01	1.9E+01	6.2E-02	4.7E-02
Lead	1.3E+02	0.00012	1.0	3.8E-01	0.0042	1.4E+00	1.0	1.4E-01	0.0416	1.0	5.2E-01	9.2E+00	9.2E+01	5.6E-02	5.6E-03
Manganese	4.1E+02	0.00012	1.0	1.2E+00	0.0042	2.0E+01	1.0	2.0E+00	0.0416	1.0	3.2E+00	1.0E+02	3.3E+02	3.1E-02	9.7E-03
Mercury	1.1E-01	0.00012	1.0	3.2E-04	0.0042	7.6E-01	1.0	7.6E-02	0.0416	1.0	7.6E-02	7.6E-02	3.8E-01	1.0E+00	2.0E-01
Nickel	2.7E+01	0.00012	1.0	7.8E-02	0.0042	***2.0E+00***	1.0	2.0E-01	0.0416	1.0	2.8E-01	4.6E+01	9.2E+01	6.0E-03	3.0E-03
Selenium	6.2E-01	0.00012	1.0	1.8E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.9E-01	3.2E-01	2.7E-01	1.6E-01
Silver	6.7E-01	0.00012	1.0	1.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.8E-01	1.8E+00	2.9E-01	2.9E-02
Thallium	***5.5E-01***	0.00012	1.0	1.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E-02	1.2E-01	4.4E+00	4.4E-01
Vanadium	2.5E+01	0.00012	1.0	7.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.2E-01	1.3E-01	1.3E+00	9.4E-01	9.4E-02
Zinc	4.4E+02	0.00012	1.0	1.3E+00	0.0042	6.5E+01	1.0	6.5E+00	0.0416	1.0	7.8E+00	2.3E+02	4.6E+02	3.4E-02	1.7E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-29
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site P (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.7E+01	6.2E+01	3.0E-03	8.4E-04
1,2-Dichlorobenzene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	9.9E+01	1.4E+03	5.3E-04	3.8E-05
1,3-Dichlorobenzene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	9.9E+01	1.4E+03	5.3E-04	3.8E-05
1,4-Dichlorobenzene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	9.9E+01	1.7E+02	5.3E-04	3.0E-04
2,2'-Oxybis(1-Chloropropane)	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	3.6E+01	2.0E+02	1.5E-03	2.6E-04
2,4,5-Trichlorophenol	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E+01	3.5E+01	4.5E-03	1.5E-03
2,4,6-Trichlorophenol	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	5.8E+02	3.5E+01	9.0E-05	1.5E-03
2,4-Dichlorophenol	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	3.5E-01	3.5E+00	1.5E-01	1.5E-02
2,4-Dinitrophenol	***5.2E+00***	0.00012	1.0	1.5E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.7E-01	1.6E-03	1.6E-02	1.7E+02	1.7E+01
2,4-Dinitrotoluene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.9E-01	2.2E+00	1.8E-01	2.4E-02
2,6-Dinitrotoluene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	8.1E-01	8.1E+00	6.4E-02	6.4E-03
2-Chloronaphthalene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.5E+01	6.0E+01	2.1E-03	8.7E-04
2-Chlorophenol	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	5.8E+01	5.8E+00	9.0E-04	9.0E-03
2-Methylnaphthalene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.8E+03	2.8E+04	1.8E-05	1.8E-06
2-Methylphenol (o-Cresol)	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
2-Nitroaniline	***4.6E+00***	0.00012	1.0	1.3E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.7E-01	4.9E+00	4.9E+01	5.5E-02	5.5E-03
2-Nitrophenol	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.9E+00	8.1E+00	1.8E-02	6.4E-03
3,3'-Dichlorobenzidine	***1.8E+00***	0.00012	1.0	5.1E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.1E-01	1.5E+01	5.1E+02	7.0E-03	2.1E-04
3/4-Methylphenol (m&p-Cresol)	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
3-Nitroaniline	***4.6E+00***	0.00012	1.0	1.3E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.7E-01	4.9E+00	4.9E+01	5.5E-02	5.5E-03
4,6-Dinitro-2-methylphenol	***4.6E+00***	0.00012	1.0	1.3E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.7E-01	2.9E-01	5.3E+00	9.3E-01	5.1E-02
4-Bromophenyl Phenyl Ether	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E+00	9.2E+00	4.5E-02	5.6E-03
4-Chloro-3-methylphenol	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.3E+02	1.3E+03	4.0E-04	4.0E-05
4-Chloroaniline	2.8E+00	0.00012	1.0	8.1E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.1E-01	1.4E+00	1.4E+01	7.5E-02	7.5E-03
4-Chlorophenyl Phenyl Ether	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E+00	9.2E+00	4.5E-02	5.6E-03
4-Nitroaniline	***4.6E+00***	0.00012	1.0	1.3E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.7E-01	4.9E+00	4.9E+01	5.5E-02	5.5E-03
4-Nitrophenol	***4.6E+00***	0.00012	1.0	1.3E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.7E-01	2.9E+00	8.1E+00	9.3E-02	3.3E-02
Acenaphthene	8.7E-01	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.7E+01	3.5E+01	3.0E-03	1.5E-03
Acenaphthylene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.7E+01	3.5E+01	3.0E-03	1.5E-03
Anthracene	8.7E-01	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+02	1.0E+03	5.2E-04	5.2E-05
Benzo(a)anthracene	9.0E-01	0.00012	1.0	2.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.2E-02	5.2E-03
Benzo(a)pyrene	9.1E-01	0.00012	1.0	2.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.2E-02	5.2E-03
Benzo(b)fluoranthene	9.2E-01	0.00012	1.0	2.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.2E-02	5.2E-03
Benzo(g,h,i)perylene	8.7E-01	0.00012	1.0	2.5E-03	0.0042	2.2E-01	1.0	2.2E-02	0.0416	1.0	2.5E-02	1.0E+00	1.0E+01	2.5E-02	2.5E-03
Benzo(k)fluoranthene	9.0E-01	0.00012	1.0	2.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.2E-02	5.2E-03
bis(2-Chloroethoxy)methane	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	3.6E+01	2.0E+02	1.5E-03	2.6E-04
bis(2-Chloroethyl)ether	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	3.6E+01	2.0E+02	1.5E-03	2.6E-04
bis(2-Ethylhexyl)phthalate	9.4E-01	0.00012	1.0	2.7E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.9E+01	1.9E+02	2.8E-03	2.8E-04
Butyl Benzyl Phthalate	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.8E+01	5.4E+01	2.8E-03	9.6E-04
Carbazole	8.7E-01	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	3.0E+00	3.0E+01	1.7E-02	1.7E-03
Chrysene	9.1E-01	0.00012	1.0	2.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.2E-02	5.2E-03
Dibenzo(a,h)anthracene	8.6E-01	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.2E-02	5.2E-03
Dibenzofuran	8.6E-01	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.5E-02	1.5E-01	3.4E+00	3.4E-01
Diethyl Phthalate	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	4.5E+03	4.5E+04	1.1E-05	1.1E-06
Dimethyl Phthalate	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	4.6E+03	4.6E+04	1.1E-05	1.1E-06
Di-n-butylphthalate	8.6E-01	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	5.6E+02	1.9E+03	9.3E-05	2.8E-05
Di-n-octylphthalate	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	5.5E+02	1.8E+03	9.5E-05	2.8E-05
Fluoranthene	1.1E+00	0.00012	1.0	3.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	1.2E+01	2.5E+01	4.2E-03	2.1E-03
Fluorene	8.7E-01	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E+01	2.5E+01	4.2E-03	2.1E-03
Hexachlorobenzene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	9.2E-02	3.4E-01	5.6E-01	1.6E-01
Hexachlorobutadiene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.3E-01	2.3E-01	2.3E-01	2.3E-01
Hexachlorocyclopentadiene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	6.9E-01	1.3E+00	7.5E-02	4.1E-02
Hexachloroethane	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E-01	1.7E+00	4.5E-01	3.0E-02
Indeno(1,2,3-cd)pyrene	8.5E-01	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.2E-02	5.2E-03
Isophorone	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.2E+01	2.1E+02	2.4E-03	2.5E-04
Naphthalene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	8.2E+00	1.6E+01	6.3E-03	3.2E-03
Nitrobenzene	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	4.6E-02	4.6E-01	1.1E+00	1.1E-01
N-Nitroso-di-n-propylamine	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E-02	1.0E-01	5.2E+00	5.2E-01
N-Nitrosodiphenylamine	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.3E+02	5.8E+01	2.3E-04	9.0E-04
Pentachlorophenol	1.4E-01	0.00012	1.0	4.1E-04	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	3.0E-03	3.7E-01	3.7E+00	7.9E-03	7.9E-04
Phenanthrene	9.4E-01	0.00012	1.0	2.7E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.7E+01	3.5E+01	3.0E-03	1.5E-03
Phenol	8.9E-01	0.00012	1.0	2.6E-03	0.0042	4.6E-01	1.0	4.6E-02	0.0416	1.0	4.9E-02	6.9E+01	1.4E+02	7.0E-04	3.5E-04
Pyrene	8.9E-01	0.00012	1.0	2.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	7.5E+00	1.2E+01	7.0E-03	4.2E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workpla
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-29
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site P (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	***2.5E-02***	0.00012	1.0	7.1E-05	0.0042	***6.2E-03***	1.0	6.2E-04	0.0416	1.0	6.9E-04	4.2E-01	2.1E+00	1.7E-03	3.3E-04
4,4'-DDE	2.5E-02	0.00012	1.0	7.2E-05	0.0042	5.2E-03	1.0	5.2E-04	0.0416	1.0	5.9E-04	4.2E-01	2.1E+00	1.4E-03	2.8E-04
4,4'-DDT	2.8E-01	0.00012	1.0	8.2E-04	0.0042	5.3E-03	1.0	5.3E-04	0.0416	1.0	1.4E-03	4.2E-01	2.1E+00	3.2E-03	6.4E-04
Aldrin	***1.3E-02***	0.00012	1.0	3.7E-05	0.0042	1.2E-03	1.0	1.2E-04	0.0416	1.0	1.6E-04	2.8E-01	1.4E+00	5.6E-04	1.1E-04
alpha-BHC	***1.3E-02***	0.00012	1.0	3.7E-05	0.0042	2.2E-03	1.0	2.2E-04	0.0416	1.0	2.6E-04	2.3E+00	4.5E+00	1.1E-04	5.7E-05
alpha-Chlordane	1.3E-02	0.00012	1.0	3.6E-05	0.0042	2.8E-03	1.0	2.8E-04	0.0416	1.0	3.1E-04	4.6E+00	9.1E+00	6.8E-05	3.4E-05
beta-BHC	***1.3E-02***	0.00012	1.0	3.7E-05	0.0042	3.3E-03	1.0	3.3E-04	0.0416	1.0	3.7E-04	5.7E-01	2.8E+00	6.5E-04	1.3E-04
delta-BHC	***1.3E-02***	0.00012	1.0	3.7E-05	0.0042	2.2E-03	1.0	2.2E-04	0.0416	1.0	2.6E-04	2.3E+00	4.5E+00	1.1E-04	5.7E-05
Dieldrin	2.1E-02	0.00012	1.0	6.0E-05	0.0042	5.8E-03	1.0	5.8E-04	0.0416	1.0	6.4E-04	1.8E-02	1.8E-01	3.7E-02	3.7E-03
Endosulfan I	***1.3E-02***	0.00012	1.0	3.7E-05	0.0042	***3.2E-03***	1.0	3.2E-04	0.0416	1.0	3.5E-04	4.3E-01	4.3E+00	8.2E-04	8.2E-05
Endosulfan II	***2.5E-02***	0.00012	1.0	7.1E-05	0.0042	4.6E-03	1.0	4.6E-04	0.0416	1.0	5.3E-04	4.3E-01	4.3E+00	1.2E-03	1.2E-04
Endosulfan Sulfate	2.4E-02	0.00012	1.0	7.0E-05	0.0042	***6.2E-03***	1.0	6.2E-04	0.0416	1.0	6.9E-04	4.3E-01	4.3E+00	1.6E-03	1.6E-04
Endrin	***2.5E-02***	0.00012	1.0	7.1E-05	0.0042	***6.2E-03***	1.0	6.2E-04	0.0416	1.0	6.9E-04	9.2E-02	9.2E-01	7.5E-03	7.5E-04
Endrin Aldehyde	5.0E-02	0.00012	1.0	1.4E-04	0.0042	***6.2E-03***	1.0	6.2E-04	0.0416	1.0	7.7E-04	9.2E-02	9.2E-01	8.3E-03	8.3E-04
Endrin Ketone	1.8E-02	0.00012	1.0	5.1E-05	0.0042	5.6E-03	1.0	5.6E-04	0.0416	1.0	6.1E-04	9.2E-02	9.2E-01	6.7E-03	6.7E-04
gamma-BHC (Lindane)	***1.3E-02***	0.00012	1.0	3.7E-05	0.0042	2.3E-03	1.0	2.3E-04	0.0416	1.0	2.7E-04	2.0E+01	2.0E+02	1.3E-05	1.3E-06
gamma-Chlordane	***1.3E-02***	0.00012	1.0	3.7E-05	0.0042	2.4E-03	1.0	2.4E-04	0.0416	1.0	2.7E-04	4.6E+00	9.1E+00	6.0E-05	3.0E-05
Heptachlor	***1.3E-02***	0.00012	1.0	3.7E-05	0.0042	3.9E-03	1.0	3.9E-04	0.0416	1.0	4.3E-04	7.4E-02	7.4E-01	5.7E-03	5.7E-04
Heptachlor Epoxide	1.2E-02	0.00012	1.0	3.4E-05	0.0042	3.8E-03	1.0	3.8E-04	0.0416	1.0	4.1E-04	1.0E-03	7.5E-03	4.1E-01	5.6E-02
Methoxychlor	***1.3E-01***	0.00012	1.0	3.7E-04	0.0042	6.7E-02	1.0	6.7E-03	0.0416	1.0	7.0E-03	2.3E+00	4.7E+00	3.0E-03	1.5E-03
Toxaphene	***1.3E+00***	0.00012	1.0	3.7E-03	0.0042	***3.2E-01***	1.0	3.2E-02	0.0416	1.0	3.5E-02	7.9E+00	7.9E+01	4.4E-03	4.4E-04
Herbicides															
2,4-D	9.0E-03	0.00012	1.0	2.6E-05	0.0042	4.2E-02	1.0	4.2E-03	0.0416	1.0	4.2E-03	1.6E+00	8.1E+00	2.6E-03	5.2E-04
2,4-DB	***8.6E-03***	0.00012	1.0	2.5E-05	0.0042	4.5E-02	1.0	4.5E-03	0.0416	1.0	4.5E-03	2.6E+00	8.3E+00	1.7E-03	5.4E-04
2,4,5-T	8.3E-03	0.00012	1.0	2.4E-05	0.0042	2.0E-02	1.0	2.0E-03	0.0416	1.0	2.0E-03	3.5E+00	1.2E+01	5.8E-04	1.8E-04
2,4,5-TP (Silvex)	***8.6E-03***	0.00012	1.0	2.5E-05	0.0042	3.1E-02	1.0	3.1E-03	0.0416	1.0	3.1E-03	1.1E+00	3.6E+00	2.9E-03	8.8E-04
Dalapon	***6.7E-01***	0.00012	1.0	1.9E-03	0.0042	***3.0E+00***	1.0	3.0E-01	0.0416	1.0	3.0E-01	9.8E+00	3.3E+01	3.1E-02	9.1E-03
Dicamba	***1.1E-02***	0.00012	1.0	3.1E-05	0.0042	***3.0E-02***	1.0	3.0E-03	0.0416	1.0	3.0E-03	3.7E+00	1.2E+01	8.1E-04	2.4E-04
Dichlorprop	9.2E-02	0.00012	1.0	2.7E-04	0.0042	1.6E-01	1.0	1.6E-02	0.0416	1.0	1.7E-02	2.0E-01	2.0E+00	8.3E-02	8.3E-03
Dinoseb	***8.8E-01***	0.00012	1.0	2.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E-01	1.2E+00	4.5E-01	4.5E-02
MCPA	***2.1E+00***	0.00012	1.0	5.9E-03	0.0042	3.5E+00	1.0	3.5E-01	0.0416	1.0	3.5E-01	2.2E-01	1.1E+00	1.6E+00	3.3E-01
MCPP	2.4E+00	0.00012	1.0	6.9E-03	0.0042	4.5E+00	1.0	4.5E-01	0.0416	1.0	4.5E-01	3.5E-01	1.0E+00	1.3E+00	4.3E-01
PCBs															
Total PCBs	1.8E+00	0.00012	1.0	5.1E-03	0.0042	***2.5E-02***	1.0	2.5E-03	0.0416	1.0	7.6E-03	1.2E-01	1.2E+00	6.6E-02	6.6E-03
Dioxins/Furans															
TEQ	3.5E-04	0.00012	1.0	1.0E-06	0.0042	5.4E-07	1.0	5.4E-08	0.0416	1.0	1.1E-06	1.2E-06	1.2E-05	9.3E-01	9.3E-02
Metals*															
Aluminum	5.6E+03	0.00012	1.0	1.6E+01	0.0042	2.8E+01	1.0	2.8E+00	0.0416	1.0	1.9E+01	1.9E+00	1.9E+01	9.8E+00	9.8E-01
Antimony	1.0E+00	0.00012	1.0	2.9E-03	0.0042	8.6E-01	1.0	8.6E-02	0.0416	1.0	8.8E-02	1.2E-01	1.2E+00	7.1E-01	7.1E-02
Arsenic	1.1E+01	0.00012	1.0	3.1E-02	0.0042	4.7E-01	1.0	4.7E-02	0.0416	1.0	7.8E-02	1.3E-01	1.3E+00	6.2E-01	6.2E-02
Barium	1.7E+02	0.00012	1.0	4.9E-01	0.0042	4.8E+00	1.0	4.8E-01	0.0416	1.0	9.8E-01	9.4E+00	3.7E+01	1.0E-01	2.7E-02
Beryllium	8.9E-01	0.00012	1.0	2.6E-03	0.0042	***2.0E-01***	1.0	2.0E-02	0.0416	1.0	2.2E-02	7.6E-01	7.6E+00	2.9E-02	2.9E-03
Cadmium	4.4E+00	0.00012	1.0	1.3E-02	0.0042	3.1E-01	1.0	3.1E-02	0.0416	1.0	4.4E-02	3.9E+00	3.9E+01	1.1E-02	1.1E-03
Chromium	2.3E+01	0.00012	1.0	6.6E-02	0.0042	3.1E-01	1.0	3.1E-02	0.0416	1.0	9.7E-02	3.8E+00	1.5E+01	2.6E-02	6.4E-03
Cobalt	7.3E+00	0.00012	1.0	2.1E-02	0.0042	6.1E-01	1.0	6.1E-02	0.0416	1.0	8.2E-02	5.8E-02	5.8E-01	1.4E+00	1.4E-01
Copper	6.7E+01	0.00012	1.0	1.9E-01	0.0042	5.0E+00	1.0	5.0E-01	0.0416	1.0	6.9E-01	1.4E+01	1.9E+01	4.8E-02	3.6E-02
Lead	2.6E+02	0.00012	1.0	7.5E-01	0.0042	3.3E+00	1.0	3.3E-01	0.0416	1.0	1.1E+00	9.2E+00	9.2E+01	1.2E-01	1.2E-02
Manganese	4.4E+02	0.00012	1.0	1.3E+00	0.0042	6.9E+00	1.0	6.9E-01	0.0416	1.0	2.0E+00	1.0E+02	3.3E+02	1.9E-02	6.0E-03
Mercury	8.0E-01	0.00012	1.0	2.3E-03	0.0042	5.2E-01	1.0	5.2E-02	0.0416	1.0	5.4E-02	7.6E-02	3.8E-01	7.1E-01	1.4E-01
Nickel	3.0E+01	0.00012	1.0	8.7E-02	0.0042	2.4E+00	1.0	2.4E-01	0.0416	1.0	3.3E-01	4.6E+01	9.2E+01	7.1E-03	3.6E-03
Selenium	1.9E+00	0.00012	1.0	5.3E-03	0.0042	3.4E+00	1.0	3.4E-01	0.0416	1.0	3.4E-01	1.9E-01	3.2E-01	1.8E+00	1.1E+00
Silver	4.9E-01	0.00012	1.0	1.4E-03	0.0042	***4.9E-01***	1.0	4.9E-02	0.0416	1.0	5.0E-02	1.8E-01	1.8E+00	2.8E-01	2.8E-02
Thallium	1.2E+00	0.00012	1.0	3.4E-03	0.0042	***4.9E-01***	1.0	4.9E-02	0.0416	1.0	5.2E-02	1.2E-02	1.2E-01	4.4E+00	4.4E-01
Vanadium	4.5E+01	0.00012	1.0	1.3E-01	0.0042	3.9E-01	1.0	3.9E-02	0.0416	1.0	1.7E-01	1.3E-01	1.3E+00	1.3E+00	1.3E-01
Zinc	7.3E+02	0.00012	1.0	2.1E+00	0.0042	4.9E+01	1.0	4.9E+00	0.0416	1.0	7.0E+00	2.3E+02	4.6E+02	3.0E-02	1.5E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-30
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site P (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.7E+01	6.2E+01	3.6E-03	1.0E-03
1,2-Dichlorobenzene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	9.9E+01	1.4E+03	6.2E-04	4.5E-05
1,3-Dichlorobenzene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	9.9E+01	1.4E+03	6.2E-04	4.5E-05
1,4-Dichlorobenzene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	9.9E+01	1.7E+02	6.2E-04	3.6E-04
2,2'-Oxybis(1-Chloropropane)	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	3.6E+01	2.0E+02	1.7E-03	3.1E-04
2,4,5-Trichlorophenol	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.2E+01	3.5E+01	5.4E-03	1.8E-03
2,4,6-Trichlorophenol	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	5.8E+02	3.5E+01	1.1E-04	1.8E-03
2,4-Dichlorophenol	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	3.5E-01	3.5E+00	1.8E-01	1.8E-02
2,4-Dinitrophenol	***2.2E+01***	0.00012	1.0	6.3E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.2E-01	1.6E-03	1.6E-02	2.0E+02	2.0E+01
2,4-Dinitrotoluene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	2.9E-01	2.2E+00	2.2E-01	2.9E-02
2,6-Dinitrotoluene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	8.1E-01	8.1E+00	7.7E-02	7.7E-03
2-Chloronaphthalene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	2.5E+01	6.0E+01	2.5E-03	1.0E-03
2-Chlorophenol	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	5.8E+01	5.8E+00	1.1E-03	1.1E-02
2-Methylnaphthalene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	2.8E+03	2.8E+04	2.2E-05	2.2E-06
2-Methylphenol (o-Cresol)	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	2.7E+02	2.7E+03	2.3E-04	2.3E-05
2-Nitroaniline	***2.2E+01***	0.00012	1.0	6.3E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.2E-01	4.9E+00	4.9E+01	6.6E-02	6.6E-03
2-Nitrophenol	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	2.9E+00	8.1E+00	2.1E-02	7.7E-03
3,3'-Dichlorobenzidine	***8.5E+00***	0.00012	1.0	2.5E-02	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.2E-01	1.5E+01	5.1E+02	8.4E-03	2.4E-04
3/4-Methylphenol (m&p-Cresol)	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	2.7E+02	2.7E+03	2.3E-04	2.3E-05
3-Nitroaniline	***2.2E+01***	0.00012	1.0	6.3E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.2E-01	4.9E+00	4.9E+01	6.6E-02	6.6E-03
4,6-Dinitro-2-methylphenol	***2.2E+01***	0.00012	1.0	6.3E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.2E-01	2.9E-01	5.3E+00	1.1E+00	6.1E-02
4-Bromophenyl Phenyl Ether	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.2E+00	9.2E+00	5.4E-02	6.7E-03
4-Chloro-3-methylphenol	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.3E+02	1.3E+03	4.8E-04	4.8E-05
4-Chloroaniline	***2.1E+01***	0.00012	1.0	6.1E-02	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.6E-01	1.4E+00	1.4E+01	1.1E-01	1.1E-02
4-Chlorophenyl Phenyl Ether	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.2E+00	9.2E+00	5.4E-02	6.7E-03
4-Nitroaniline	***2.2E+01***	0.00012	1.0	6.3E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.2E-01	4.9E+00	4.9E+01	6.6E-02	6.6E-03
4-Nitrophenol	***2.2E+01***	0.00012	1.0	6.3E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.2E-01	2.9E+00	8.1E+00	1.1E-01	3.9E-02
Acenaphthene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.7E+01	3.5E+01	3.5E-03	1.8E-03
Acenaphthylene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.7E+01	3.5E+01	3.5E-03	1.8E-03
Anthracene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.0E+02	1.0E+03	6.2E-04	6.2E-05
Benzo(a)anthracene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.0E+00	1.0E+01	6.2E-02	6.2E-03
Benzo(a)pyrene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.0E+00	1.0E+01	6.2E-02	6.2E-03
Benzo(b)fluoranthene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.0E+00	1.0E+01	6.2E-02	6.2E-03
Benzo(g,h,i)perylene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.0E+00	1.0E+01	6.2E-02	6.2E-03
Benzo(k)fluoranthene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.0E+00	1.0E+01	6.2E-02	6.2E-03
bis(2-Chloroethoxy)methane	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	3.6E+01	2.0E+02	1.7E-03	3.1E-04
bis(2-Chloroethyl)ether	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	3.6E+01	2.0E+02	1.7E-03	3.1E-04
bis(2-Ethylhexyl)phthalate	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.9E+01	1.9E+02	3.3E-03	3.3E-04
Butyl Benzyl Phthalate	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.8E+01	5.4E+01	3.4E-03	1.1E-03
Carbazole	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	3.0E+00	3.0E+01	2.1E-02	2.1E-03
Chrysene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.0E+00	1.0E+01	6.2E-02	6.2E-03
Dibenzo(a,h)anthracene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.0E+00	1.0E+01	6.2E-02	6.2E-03
Dibenzofuran	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.5E-02	1.5E-01	4.1E+00	4.1E-01
Diethyl Phthalate	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	4.5E+03	4.5E+04	1.4E-05	1.4E-06
Dimethyl Phthalate	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	4.6E+03	4.6E+04	1.4E-05	1.4E-06
Di-n-butylphthalate	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	5.6E+02	1.9E+03	1.1E-04	3.3E-05
Di-n-octylphthalate	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	5.5E+02	1.8E+03	1.1E-04	3.4E-05
Fluoranthene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.2E+01	2.5E+01	5.0E-03	2.5E-03
Fluorene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.2E+01	2.5E+01	5.0E-03	2.5E-03
Hexachlorobenzene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	9.2E-02	3.4E-01	6.7E-01	1.8E-01
Hexachlorobutadiene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	2.3E-01	2.3E-01	2.7E-01	2.7E-01
Hexachlorocyclopentadiene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	6.9E-01	1.3E+00	8.9E-02	4.9E-02
Hexachloroethane	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.2E-01	1.7E+00	5.4E-01	3.6E-02
Indeno(1,2,3-cd)pyrene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.0E+00	1.0E+01	6.2E-02	6.2E-03
Isophorone	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	2.2E+01	2.1E+02	2.9E-03	3.0E-04
Naphthalene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	8.2E+00	1.6E+01	7.5E-03	3.8E-03
Nitrobenzene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	4.6E-02	4.6E-01	1.3E+00	1.3E-01
N-Nitroso-di-n-propylamine	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.0E-02	1.0E-01	6.2E+00	6.2E-01
N-Nitrosodiphenylamine	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	2.3E+02	5.8E+01	2.7E-04	1.1E-03
Pentachlorophenol	7.9E-01	0.00012	1.0	2.3E-03	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	4.8E-03	3.7E-01	3.7E+00	1.3E-02	1.3E-03
Phenanthrene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.7E+01	3.5E+01	3.5E-03	1.8E-03
Phenol	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	6.9E+01	1.4E+02	8.9E-04	4.5E-04
Pyrene	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	7.5E+00	1.2E+01	8.3E-03	5.0E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workpla
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-30
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site P (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	***4.1E-02***	0.00012	1.0	1.2E-04	0.0042	***1.0E-02***	1.0	1.0E-03	0.0416	1.0	1.1E-03	4.2E-01	2.1E+00	2.7E-03	5.3E-04
4,4'-DDE	***4.1E-02***	0.00012	1.0	1.2E-04	0.0042	***1.0E-02***	1.0	1.0E-03	0.0416	1.0	1.1E-03	4.2E-01	2.1E+00	2.7E-03	5.3E-04
4,4'-DDT	1.1E+00	0.00012	1.0	3.2E-03	0.0042	***1.0E-02***	1.0	1.0E-03	0.0416	1.0	4.2E-03	4.2E-01	2.1E+00	1.0E-02	2.0E-03
Aldrin	***2.1E-02***	0.00012	1.0	6.1E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	3.2E-04	2.8E-01	1.4E+00	1.1E-03	2.2E-04
alpha-BHC	***2.1E-02***	0.00012	1.0	6.1E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	3.2E-04	2.3E+00	4.5E+00	1.4E-04	6.9E-05
alpha-Chlordane	***2.1E-02***	0.00012	1.0	6.1E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.6E-04	4.6E+00	9.1E+00	1.2E-04	6.1E-05
beta-BHC	***2.1E-02***	0.00012	1.0	6.1E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.6E-04	5.7E-01	2.8E+00	9.9E-04	2.0E-04
delta-BHC	***2.1E-02***	0.00012	1.0	6.1E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	3.2E-04	2.3E+00	4.5E+00	1.4E-04	6.9E-05
Dieldrin	***4.1E-02***	0.00012	1.0	1.2E-04	0.0042	***1.0E-02***	1.0	1.0E-03	0.0416	1.0	1.1E-03	1.8E-02	1.8E-01	6.4E-02	6.4E-03
Endosulfan I	***2.1E-02***	0.00012	1.0	6.1E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.6E-04	4.3E-01	4.3E+00	1.3E-03	1.3E-04
Endosulfan II	***4.1E-02***	0.00012	1.0	1.2E-04	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	6.1E-04	4.3E-01	4.3E+00	1.4E-03	1.4E-04
Endosulfan Sulfate	***4.1E-02***	0.00012	1.0	1.2E-04	0.0042	***1.0E-02***	1.0	1.0E-03	0.0416	1.0	1.1E-03	4.3E-01	4.3E+00	2.6E-03	2.6E-04
Endrin	***4.1E-02***	0.00012	1.0	1.2E-04	0.0042	***1.0E-02***	1.0	1.0E-03	0.0416	1.0	1.1E-03	9.2E-02	9.2E-01	1.2E-02	1.2E-03
Endrin Aldehyde	1.4E-01	0.00012	1.0	4.0E-04	0.0042	***1.0E-02***	1.0	1.0E-03	0.0416	1.0	1.4E-03	9.2E-02	9.2E-01	1.5E-02	1.5E-03
Endrin Ketone	***4.1E-02***	0.00012	1.0	1.2E-04	0.0042	***1.0E-02***	1.0	1.0E-03	0.0416	1.0	1.1E-03	9.2E-02	9.2E-01	1.2E-02	1.2E-03
gamma-BHC (Lindane)	***2.1E-02***	0.00012	1.0	6.1E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	3.2E-04	2.0E+01	2.0E+02	1.6E-05	1.6E-06
gamma-Chlordane	***2.1E-02***	0.00012	1.0	6.1E-05	0.0042	3.4E-03	1.0	3.4E-04	0.0416	1.0	4.0E-04	4.6E+00	9.1E+00	8.8E-05	4.4E-05
Heptachlor	***2.1E-02***	0.00012	1.0	6.1E-05	0.0042	5.5E-03	1.0	5.5E-04	0.0416	1.0	6.1E-04	7.4E-02	7.4E-01	8.2E-03	8.2E-04
Heptachlor Epoxide	***2.1E-02***	0.00012	1.0	6.1E-05	0.0042	7.6E-03	1.0	7.6E-04	0.0416	1.0	8.2E-04	1.0E-03	7.5E-03	8.1E-01	1.1E-01
Methoxychlor	***2.1E-01***	0.00012	1.0	6.1E-04	0.0042	1.9E-01	1.0	1.9E-02	0.0416	1.0	2.0E-02	2.3E+00	4.7E+00	8.4E-03	4.2E-03
Toxaphene	***2.1E+00***	0.00012	1.0	6.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.6E-02	7.9E+00	7.9E+01	7.1E-03	7.1E-04
Herbicides															
2,4-D	***4.8E-02***	0.00012	1.0	1.4E-04	0.0042	6.8E-02	1.0	6.8E-03	0.0416	1.0	6.9E-03	1.6E+00	8.1E+00	4.3E-03	8.6E-04
2,4-DB	***4.8E-02***	0.00012	1.0	1.4E-04	0.0042	9.5E-02	1.0	9.5E-03	0.0416	1.0	9.6E-03	2.6E+00	8.3E+00	3.6E-03	1.2E-03
2,4,5-T	***4.8E-02***	0.00012	1.0	1.4E-04	0.0042	3.7E-02	1.0	3.7E-03	0.0416	1.0	3.8E-03	3.5E+00	1.2E+01	1.1E-03	3.3E-04
2,4,5-TP (Silvex)	***4.8E-02***	0.00012	1.0	1.4E-04	0.0042	8.7E-02	1.0	8.7E-03	0.0416	1.0	8.8E-03	1.1E+00	3.6E+00	8.2E-03	2.5E-03
Dalapon	***1.9E+00***	0.00012	1.0	5.5E-03	0.0042	***3.0E+00***	1.0	3.0E-01	0.0416	1.0	3.1E-01	9.8E+00	3.3E+01	3.1E-02	9.2E-03
Dicamba	***4.8E-02***	0.00012	1.0	1.4E-04	0.0042	***3.0E-02***	1.0	3.0E-03	0.0416	1.0	3.1E-03	3.7E+00	1.2E+01	8.4E-04	2.5E-04
Dichlorprop	***6.0E-01***	0.00012	1.0	1.7E-03	0.0042	2.0E-01	1.0	2.0E-02	0.0416	1.0	2.2E-02	2.0E-01	2.0E+00	1.1E-01	1.1E-02
Dinoseb	***4.3E+00***	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.2E-01	1.2E+00	5.4E-01	5.4E-02
MCPA	***1.2E+01***	0.00012	1.0	3.3E-02	0.0042	4.8E+00	1.0	4.8E-01	0.0416	1.0	5.1E-01	2.2E-01	1.1E+00	2.4E+00	4.8E-01
MCPP	***1.2E+01***	0.00012	1.0	3.3E-02	0.0042	8.8E+00	1.0	8.8E-01	0.0416	1.0	9.1E-01	3.5E-01	1.0E+00	2.6E+00	8.8E-01
PCBs															
Total PCBs	7.0E+00	0.00012	1.0	2.0E-02	0.0042	***2.5E-02***	1.0	2.5E-03	0.0416	1.0	2.3E-02	1.2E-01	1.2E+00	2.0E-01	2.0E-02
Dioxins/Furans															
TEQ	7.2E-04	0.00012	1.0	2.1E-06	0.0042	6.7E-07	1.0	6.7E-08	0.0416	1.0	2.1E-06	1.2E-06	1.2E-05	1.9E+00	1.9E-01
Metals*															
Aluminum	8.7E+03	0.00012	1.0	2.5E+01	0.0042	5.1E+01	1.0	5.1E+00	0.0416	1.0	3.0E+01	1.9E+00	1.9E+01	1.6E+01	1.6E+00
Antimony	1.6E+00	0.00012	1.0	4.6E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.2E-01	1.2E+00	8.4E-01	8.4E-02
Arsenic	2.6E+01	0.00012	1.0	7.5E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.3E-01	1.3E-01	1.3E+00	1.0E+00	1.0E-01
Barium	7.2E+02	0.00012	1.0	2.1E+00	0.0042	5.4E+00	1.0	5.4E-01	0.0416	1.0	2.6E+00	9.4E+00	3.7E+01	2.8E-01	7.2E-02
Beryllium	1.8E+00	0.00012	1.0	5.2E-03	0.0042	***2.0E-01***	1.0	2.0E-02	0.0416	1.0	2.5E-02	7.6E-01	7.6E+00	3.3E-02	3.3E-03
Cadmium	2.5E+01	0.00012	1.0	7.2E-02	0.0042	5.5E-01	1.0	5.5E-02	0.0416	1.0	1.3E-01	3.9E+00	3.9E+01	3.3E-02	3.3E-03
Chromium	1.0E+02	0.00012	1.0	2.9E-01	0.0042	4.1E-01	1.0	4.1E-02	0.0416	1.0	3.3E-01	3.8E+00	1.5E+01	8.7E-02	2.2E-02
Cobalt	1.3E+01	0.00012	1.0	3.8E-02	0.0042	1.0E+00	1.0	1.0E-01	0.0416	1.0	1.4E-01	5.8E-02	5.8E-01	2.4E+00	2.4E-01
Copper	2.5E+02	0.00012	1.0	7.2E-01	0.0042	6.9E+00	1.0	6.9E-01	0.0416	1.0	1.4E+00	1.4E+01	1.9E+01	9.8E-02	7.4E-02
Lead	2.0E+03	0.00012	1.0	5.8E+00	0.0042	5.0E+00	1.0	5.0E-01	0.0416	1.0	6.3E+00	9.2E+00	9.2E+01	6.8E-01	6.8E-02
Manganese	2.7E+03	0.00012	1.0	7.8E+00	0.0042	7.9E+00	1.0	7.9E-01	0.0416	1.0	8.6E+00	1.0E+02	3.3E+02	8.4E-02	2.6E-02
Mercury	5.6E+00	0.00012	1.0	1.6E-02	0.0042	1.0E+00	1.0	1.0E-01	0.0416	1.0	1.2E-01	7.6E-02	3.8E-01	1.5E+00	3.1E-01
Nickel	1.3E+02	0.00012	1.0	3.8E-01	0.0042	3.9E+00	1.0	3.9E-01	0.0416	1.0	7.7E-01	4.6E+01	9.2E+01	1.7E-02	8.3E-03
Selenium	7.0E+00	0.00012	1.0	2.0E-02	0.0042	1.2E+01	1.0	1.2E+00	0.0416	1.0	1.2E+00	1.9E-01	3.2E-01	6.3E+00	3.8E+00
Silver	1.4E+00	0.00012	1.0	4.0E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.4E-02	1.8E-01	1.8E+00	3.0E-01	3.0E-02
Thallium	***1.7E+00***	0.00012	1.0	4.8E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.5E-02	1.2E-02	1.2E-01	4.7E+00	4.7E-01
Vanadium	2.6E+02	0.00012	1.0	7.5E-01	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	8.0E-01	1.3E-01	1.3E+00	6.2E+00	6.2E-01
Zinc	3.1E+03	0.00012	1.0	8.9E+00	0.0042	7.9E+01	1.0	7.9E+00	0.0416	1.0	1.7E+01	2.3E+02	4.6E+02	7.3E-02	3.7E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	OFF-SITE (Background)				SITE O									
				SOIL-OS-2 08/14/02 0.5 Ft 16.5	SOIL-OS-2 DUP 08/14/02 0.5 Ft 14.1	SOIL-OS-3 08/14/02 0.5 Ft 13.1	SOIL-OS-4 08/15/02 0.5 Ft 12.8	SOIL-O-1 07/10/02 0.5 Ft 6.7	SOIL-O-2 07/10/02 0.5 Ft 12.3	SOIL-O-3 07/10/02 0.5 Ft 13.1	SA-O-1-SS 05/26/05 0.5 Ft NR	SA-O-1-SS-D 05/26/05 0.5 Ft NR	SA-O-2-SS 05/26/05 0.5 Ft NR	SA-O-3-SS 05/26/05 0.5 Ft NR	SA-O-4-SS 05/26/05 0.5 Ft NR	SOIL-O-4-SS 05/26/05 0.5 Ft NR	SOIL-O-4-SS-D 05/26/05 0.5 Ft NR
VOCs (ug/kg)	**Benchmark**																
1,1,1-Trichloroethane	100	b,i		2.9E-02	3.8E-02	2.8E-02	4.6E-02	***2.1E+00***	4.9E-02	2.8E-02	2.1E-02	8.6E-02	1.9E-02	1.9E-02	2.0E-02	3.3E-02	3.4E-02
1,1,2,2-Tetrachloroethane	5000	f		5.8E-04	7.5E-04	5.5E-04	9.1E-04	4.2E-02	9.8E-04	5.6E-04	4.2E-04	4.9E-04	3.7E-04	3.8E-04	3.9E-04	6.5E-04	6.7E-04
1,1,2-Trichloroethane	100	b,i		2.9E-02	3.8E-02	2.8E-02	4.6E-02	***2.1E+00***	4.9E-02	2.8E-02	2.1E-02	2.5E-02	1.9E-02	1.9E-02	2.0E-02	3.3E-02	3.4E-02
1,1-Dichloroethane	100	b,i		2.9E-02	3.8E-02	2.8E-02	4.6E-02	***2.1E+00***	4.9E-02	2.8E-02	2.1E-02	2.5E-02	1.9E-02	1.9E-02	2.0E-02	3.3E-02	3.4E-02
1,1-Dichloroethylene	100	b,i		2.9E-02	3.8E-02	2.8E-02	4.6E-02	***2.1E+00***	4.9E-02	2.8E-02	2.1E-02	2.5E-02	1.9E-02	1.9E-02	2.0E-02	3.3E-02	3.4E-02
1,2-Dichloroethane	100	b,i		2.9E-02	3.8E-02	2.8E-02	4.6E-02	***2.1E+00***	4.9E-02	2.8E-02	2.1E-02	2.5E-02	1.9E-02	1.9E-02	2.0E-02	3.3E-02	3.4E-02
1,2-Dichloroethene (total)	100	b,i		6.0E-02	7.5E-02	5.5E-02	9.0E-02	***4.3E+00***	1.0E-01	5.5E-02	4.2E-02	4.9E-02	3.7E-02	3.8E-02	3.9E-02	6.5E-02	6.5E-02
1,2-Dichloropropane	700000	g		4.1E-06	5.4E-06	3.9E-06	6.5E-06	3.0E-04	7.0E-06	4.0E-06	3.0E-06	3.5E-06	2.6E-06	2.7E-06	2.8E-06	4.6E-06	4.8E-06
2-Butanone (MEK)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Hexanone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Methyl-2-pentanone (MIBK)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Acetone	NC	NA		NC	NC	NC	NC	R	NC	NC	NC	NC	NC	NC	NC	NC	NC
Benzene	50	b		5.8E-02	7.5E-02	5.5E-02	9.1E-02	**1.2E+01**	9.8E-02	5.6E-02	1.3E-01	2.2E-01	4.2E-02	3.8E-02	2.2E-02	6.5E-02	6.7E-02
Bromodichloromethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Bromoform	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Bromomethane	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Carbon Disulfide	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Carbon Tetrachloride	1000000	b		2.9E-06	3.8E-06	2.8E-06	4.6E-06	2.1E-04	4.9E-06	2.8E-06	2.1E-06	2.5E-06	1.9E-06	1.9E-06	2.0E-06	3.3E-06	3.4E-06
Chlorobenzene	40000	g		7.3E-05	9.4E-05	6.9E-05	1.1E-04	1.5E-01	1.2E-04	7.0E-05	4.5E-04	7.5E-04	4.6E-05	4.8E-05	4.9E-05	1.2E-04	8.0E-05
Chloroethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Chloroform	5.0	c,i		5.8E-01	7.5E-01	5.5E-01	9.1E-01	***4.2E+01***	9.8E-01	5.6E-01	4.2E-01	4.9E-01	3.7E-01	3.8E-01	3.9E-01	6.5E-01	6.7E-01
Chloromethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
cis-1,3-Dichloropropene	5.0	c,i		5.8E-01	7.5E-01	5.5E-01	9.1E-01	***4.2E+01***	9.8E-01	5.6E-01	4.2E-01	4.9E-01	3.7E-01	3.8E-01	3.9E-01	6.5E-01	6.7E-01
Dibromochloromethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Ethylbenzene	50	b		5.8E-02	9.0E-03	1.1E-02	9.1E-02	**8.8E+01**	7.6E-03	5.6E-02	6.8E-02	9.2E-02	2.6E-02	3.8E-02	3.0E-02	6.5E-02	6.7E-02
Methylene Chloride	5000	e		5.8E-04	7.5E-04	5.5E-04	9.1E-04	4.2E-02	9.8E-04	5.6E-04	4.2E-04	4.9E-04	3.7E-04	3.8E-04	3.9E-04	6.5E-04	6.7E-04
Styrene (Monomer)	300000	a		9.7E-06	2.5E-06	4.3E-06	1.5E-05	7.0E-04	1.6E-05	9.3E-06	7.0E-06	8.2E-06	6.2E-06	6.3E-06	6.5E-06	1.1E-05	1.1E-05
Tetrachloroethene	10	b		2.9E-01	3.8E-01	2.8E-01	4.6E-01	**2.9E+01**	1.0E-01	2.8E-01	3.5E-01	4.3E-01	1.9E-01	1.9E-01	2.0E-01	3.3E-01	3.4E-01
Toluene	200000	a		1.5E-05	1.9E-05	1.4E-05	2.3E-05	4.4E-03	2.5E-05	1.4E-05	1.9E-05	1.8E-05	1.5E-05	9.5E-06	1.1E-05	2.6E-05	2.4E-05
trans-1,3-Dichloropropene	5.0	c,i		5.8E-01	7.5E-01	5.5E-01	9.1E-01	***4.2E+01***	9.8E-01	5.6E-01	4.2E-01	4.9E-01	3.7E-01	3.8E-01	3.9E-01	6.5E-01	6.7E-01
Trichloroethylene	5.0	c		5.8E-01	7.5E-01	5.5E-01	9.1E-01	***4.2E+01***	1.2E-01	5.6E-01	4.2E-01	4.9E-01	3.7E-01	3.8E-01	3.9E-01	6.5E-01	6.7E-01
Vinyl chloride	10	b		6.0E-01	7.5E-01	5.5E-01	9.0E-01	***4.3E+01***	***1.0E+00***	5.5E-01	2.1E-01	2.5E-01	1.9E-01	1.9E-01	2.0E-01	3.3E-01	3.4E-01
Xylenes, Total	50	b		1.2E-01	2.2E-02	1.1E-02	1.8E-01	**1.6E+03**	2.6E-02	1.1E-01	4.4E-01	4.8E-01	6.4E-02	7.6E-02	1.4E-01	1.3E-01	1.3E-01
SVOCs (ug/kg)																	
1,2,4-Trichlorobenzene	20000	g		1.0E-02	9.5E-03	9.3E-03	9.5E-03	8.8E-03	9.5E-03	9.8E-03	9.0E-03	6.0E-03	1.0E-02	1.5E-03	9.8E-03	1.0E-02	1.0E-02
1,2-Dichlorobenzene	1.0	c		***2.0E+02***	***1.9E+02***	***1.9E+02***	***1.9E+02***	**3.4E+01**	***1.9E+02***	**3.6E+01**	**2.9E+02**	**7.6E+02**	***2.0E+02***	***2.0E+02***	**4.9E+01**	**4.1E+01**	***2.0E+02***
1,3-Dichlorobenzene	1.0	c		***2.0E+02***	***1.9E+02***	***1.9E+02***	***1.9E+02***	***1.8E+02***	***1.9E+02***	***2.0E+02***	***2.2E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***
1,4-Dichlorobenzene	20000	g		1.0E-02	9.5E-03	9.3E-03	9.5E-03	8.8E-03	9.5E-03	9.8E-03	6.0E-03	1.9E-02	1.0E-02	9.8E-03	2.3E-03	1.0E-02	1.0E-02
2,2'-Oxybis(1-Chloropropane)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4,5-Trichlorophenol	4000	a		5.0E-02	4.8E-02	4.6E-02	4.8E-02	4.4E-02	4.8E-02	4.9E-02	5.4E-02	5.0E-02	5.0E-02	4.9E-02	4.9E-02	5.0E-02	5.0E-02
2,4,6-Trichlorophenol	10000	g		2.0E-02	1.9E-02	1.9E-02	1.9E-02	1.8E-02	1.9E-02	2.0E-02	1.6E-02	4.4E-02	2.0E-02	2.0E-02	2.0E-02	2.0E-02	2.0E-02
2,4-Dichlorophenol	0.50	c		***4.0E+02***	***3.8E+02***	***3.7E+02***	***3.8E+02***	***3.5E+02***	***3.8E+02***	**7.0E+01**	**3.6E+02**	**8.8E+02**	***4.0E+02***	***3.9E+02***	***3.9E+02***	***4.0E+02***	***4.0E+02***
2,4-Dimethylphenol	1.0	c		***2.0E+02***	***1.9E+02***	***1.9E+02***	***1.9E+02***	***1.8E+02***	***1.9E+02***	***2.0E+02***	***2.2E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***
2,4-Dinitrophenol	20000	a		5.3E-02	4.8E-02	4.8E-02	5.0E-02	4.5E-02	4.8E-02	5.0E-02	5.5E-02	5.3E-02	5.3E-02	5.0E-02	5.0E-02	5.3E-02	5.0E-02
2,4-Dinitrotoluene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,6-Dinitrotoluene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Chloronaphthalene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Chlorophenol	0.50	c		***4.0E+02***	***3.8E+02***	***3.7E+02***	***3.8E+02***	***3.5E+02***	***3.8E+02***	***3.9E+02***	***4.3E+02***	***4.0E+02***	***4.0E+02***	***3.9E+02***	***3.9E+02***	***4.0E+02***	***4.0E+02***
2-Methylnaphthalene	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Methylphenol (o-Cresol)	1.0	c		***2.0E+02***	***1.9E+02***	***1.9E+02***	***1.9E+02***	***1.8E+02***	***1.9E+02***	***2.0E+02***	***2.2E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***
2-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Nitrophenol	1.0	c		***2.0E+02***	***1.9E+02***	***1.9E+02***	***1.9E+02***	***1.8E+02***	***1.9E+02***	***2.0E+02***	***2.2E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***
3,3'-Dichlorobenzidine	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
3/4-Methylphenol (m&p-Cresol)	1.0	c		***2.0E+02***	***1.9E+02***	***1.9E+02***	***1.9E+02***	***1.8E+02***	***1.9E+02***	***2.0E+02***	***2.2E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***
3-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4,6-Dinitro-2-methylphenol	1.0	c		***1.1E+03***	***9.5E+02***	***9.5E+02***	***1.0E+03***	***9.0E+02***	***9.5E+02***	***1.0E+03***	***1.1E+03***	***1.1E+03***	***1.1E+03***	***1.0E+03***	***1.0E+03***	***1.1E+03***	***1.0E+03***
4-Bromophenyl Phenyl Ether	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Chloro-3-methylphenol	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Chloroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Chlorophenyl Phenyl Ether	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Nitrophenol	7000	g		1.5E-01	1.4E-01	1.4E-01	1.4E-01	1.3E-01	1.4E-01	1.4E-01	1.6E-01	1.5E-01	1.5E-01	1.4E-01	1.4E-01	1.5E-01	1.4E-01
Acenaphthene	20000	a		1.0E-02	9.5E-03	9.3E-03	9.5E-03	8.8E-03	9.5E-03	9.8E-03	1.1E-02	1.0E-02	1.0E-02	9.8E-03	9.8E-03	1.0E-02	1.0E-02
Acenaphthylene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Anthracene	100	b		***2.0E+00***	***1.9E+00***	***1.9E+00***	***1.9E+00***	***1.8E+00***	***1.9E+00***	***2.0E+00***	***2.2E+00***	***2.0E+00***	***2.0E+00***	***2.0E+00***	***2.0E+00***	***2.0E+00***	***2.0E+00***

NOTES:
a = ORNL Vegetative Benchmarks (Efromyson*et al*., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
e = Canadian Environmental Quality Guidelines - Residential/Parkland Standards, 2002
f = NOAA Screening Quick Reference Tables, Urban Park/Residential Target, 1999
g = ORNL Soil Invertebrate Benchmark (Efromyson*et al.*, 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
R = Data point was rejected, therefore the hazard quotient could not be calculated
NR = Analyte not analyzed

Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentration
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentration

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	OFF-SITE (Background)				SITE O									
				SOIL-OS-2 08/14/02 0.5 Ft 16.5	SOIL-OS-2 DUP 08/14/02 0.5 Ft 14.1	SOIL-OS-3 08/14/02 0.5 Ft 13.1	SOIL-OS-4 08/15/02 0.5 Ft 12.8	SOIL-O-1 07/10/02 0.5 Ft 6.7	SOIL-O-2 07/10/02 0.5 Ft 12.3	SOIL-O-3 07/10/02 0.5 Ft 13.1	SA-O-1-SS 05/26/05 0.5 Ft NR	SA-O-1-SS-D 05/26/05 0.5 Ft NR	SA-O-2-SS 05/26/05 0.5 Ft NR	SA-O-3-SS 05/26/05 0.5 Ft NR	SA-O-4-SS 05/26/05 0.5 Ft NR	SOIL-O-4-SS 05/26/05 0.5 Ft NR	SOIL-O-4-SS-D 05/26/05 0.5 Ft NR
SVOCs (ug/kg)	**Benchmark**																
Benzo(a)anthracene	1.0	c		**2.8E+01**	**2.2E+01**	**4.0E+01**	***1.9E+02***	**4.1E+01**	***1.9E+02***	**6.3E+01**	**1.7E+02**	***2.0E+02***	***2.0E+02***	***2.0E+02***	**3.7E+01**	***2.0E+02***	***2.0E+02***
Benzo(a)pyrene	100	b		***2.0E+00***	***1.9E+00***	***1.9E+00***	***1.9E+00***	4.6E-01	***1.9E+00***	***2.0E+00***	**1.8E+00**	**2.0E+00**	***2.0E+00***	***2.0E+00***	3.7E-01	***2.0E+00***	***2.0E+00***
Benzo(b)fluoranthene	1.0	c		**4.0E+01**	***1.9E+02***	***1.9E+02***	***1.9E+02***	**8.9E+01**	**1.4E+02**	**9.8E+01**	**2.6E+02**	**3.6E+02**	***2.0E+02***	***2.0E+02***	**4.0E+01**	***2.0E+02***	***2.0E+02***
Benzo(g,h,i)perylene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Benzo(k)fluoranthene	1.0	c		**2.5E+01**	***1.8E+01***	**6.0E+01**	***1.9E+02***	***1.8E+02***	***1.9E+02***	**1.0E+02**	**2.6E+02**	**3.4E+02**	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***
bis(2-Chloroethoxy)methane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
bis(2-Chloroethyl)ether	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
bis(2-Ethylhexyl)phthalate	30	h		***6.7E+00***	**1.0E+01**	***6.2E+00***	***6.3E+00***	**8.3E+00**	7.7E-01	**2.1E+00**	**4.7E+00**	***6.7E+00***	**2.4E+01**	***6.5E+00***	**2.1E+01**	***6.7E+00***	***6.7E+00***
Butyl Benzyl Phthalate	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Carbazole	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Chrysene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dibenzo(a,h)anthracene	1.0	c		***2.0E+02***	***1.9E+02***	***1.9E+02***	***1.9E+02***	***1.8E+02***	**7.8E+01**	**1.3E+02**	**1.6E+02**	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***
Dibenzofuran	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Diethyl Phthalate	100000	a		2.0E-03	1.9E-03	1.9E-03	1.9E-03	1.8E-03	1.9E-03	2.0E-03	2.2E-03	2.0E-03	2.0E-03	2.0E-03	2.0E-03	2.0E-03	2.0E-03
Dimethyl Phthalate	200000	g		1.0E-03	9.5E-04	9.3E-04	9.5E-04	8.8E-04	9.5E-04	9.8E-04	1.1E-03	1.0E-03	1.0E-03	9.8E-04	9.8E-04	1.0E-03	1.0E-03
Di-n-butylphthalate	200000	a	NP	1.0E-03	9.5E-04	9.3E-04	9.5E-04	8.8E-04	9.5E-04	2.5E-04	1.1E-03	1.0E-03	1.9E-04	9.8E-04	9.8E-04	1.0E-03	1.0E-03
Di-n-octylphthalate	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Fluoranthene	100	b		5.6E-01	***1.9E+00***	4.7E-01	***1.9E+00***	8.2E-01	***1.9E+00***	***2.0E+00***	***2.2E+00***	***2.0E+00***	***2.0E+00***	***2.0E+00***	3.9E-01	3.6E-01	3.7E-01
Fluorene	30000	g		6.7E-03	6.3E-03	6.2E-03	6.3E-03	5.8E-03	6.3E-03	6.5E-03	7.2E-03	6.7E-03	6.7E-03	6.5E-03	6.5E-03	6.7E-03	6.7E-03
Hexachlorobenzene	2.0	c		***1.0E+02***	***9.5E+01***	***9.3E+01***	***9.5E+01***	***8.8E+01***	***9.5E+01***	**5.5E+01**	**2.3E+02**	**1.5E+02**	***1.0E+02***	***9.8E+01***	***9.8E+01***	***1.0E+02***	***1.0E+02***
Hexachlorobutadiene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Hexachlorocyclopentadiene	10000	a		2.0E-02	1.9E-02	1.9E-02	1.9E-02	1.8E-02	1.9E-02	2.0E-02	2.2E-02	2.0E-02	2.0E-02	2.0E-02	2.0E-02	2.0E-02	2.0E-02
Hexachloroethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Indeno(1,2,3-cd)pyrene	1.0	c		***2.0E+02***	***1.9E+02***	***1.9E+02***	***1.9E+02***	**3.2E+01**	***1.9E+02***	***2.0E+02***	**1.7E+02**	**2.3E+02**	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***
Isophorone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Naphthalene	600	e		3.3E-01	3.2E-01	3.1E-01	3.2E-01	2.9E-01	3.2E-01	3.3E-01	3.6E-01	6.0E-02	3.3E-01	3.3E-01	3.3E-01	3.3E-01	3.3E-01
Nitrobenzene	40000	g		5.0E-03	4.8E-03	4.6E-03	4.8E-03	4.4E-03	4.8E-03	4.9E-03	5.4E-03	5.0E-03	5.0E-03	4.9E-03	4.9E-03	5.0E-03	5.0E-03
N-Nitroso-di-n-propylamine	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
N-Nitrosodiphenylamine	20000	g		1.0E-02	9.5E-03	9.3E-03	9.5E-03	8.8E-03	9.5E-03	9.8E-03	1.1E-02	1.0E-02	1.0E-02	9.8E-03	9.8E-03	1.0E-02	1.0E-02
Pentachlorophenol	3000	a		1.7E-03	9.3E-04	5.7E-04	3.3E-03	2.0E-02	7.7E-03	6.7E-01	**6.3E+00**	**4.0E+00**	1.2E-02	5.0E-02	**3.1E+00**	1.3E-02	9.3E-03
Phenanthrene	5.0	c		**6.8E+00**	**6.2E+00**	**1.0E+01**	***3.8E+01***	**6.4E+00**	***3.8E+01***	**8.0E+00**	**3.0E+01**	**3.6E+01**	***4.0E+01***	**8.8E+00**	**1.4E+01**	***4.0E+01***	***4.0E+01***
Phenol	70000	a		2.9E-03	2.7E-03	2.6E-03	2.7E-03	2.5E-03	2.7E-03	2.8E-03	3.1E-03	2.9E-03	2.9E-03	2.8E-03	2.8E-03	2.9E-03	2.9E-03
Pyrene	10	c		**5.7E+00**	***1.9E+01***	**5.6E+00**	***1.9E+01***	**7.8E+00**	***1.9E+01***	**1.3E+01**	**4.9E+01**	**5.5E+01**	***2.0E+01***	**7.7E+00**	**7.5E+00**	**3.3E+00**	**3.7E+00**
Pesticides (ug/kg)																	
4,4'-DDD	10	d		6.6E-01	2.4E-01	1.9E-01	1.9E-01	1.8E-01	1.9E-01	**8.6E+00**	NR	NR	NR	NR	NR	NR	NR
4,4'-DDE	10	d		**1.6E+00**	8.4E-01	4.1E-01	1.9E-01	1.8E-01	1.9E-01	***2.0E+00***	NR	NR	NR	NR	NR	NR	NR
4,4'-DDT	10	c		**4.6E+00**	**2.5E+00**	**1.6E+00**	1.9E-01	1.8E-01	8.1E-02	**2.3E+01**	NR	NR	NR	NR	NR	NR	NR
Aldrin	2.5	b		4.2E-01	3.8E-01	3.8E-01	4.0E-01	3.6E-01	3.8E-01	***4.0E+00***	NR	NR	NR	NR	NR	NR	NR
alpha-BHC	2.5	b		4.2E-01	3.8E-01	3.8E-01	4.0E-01	3.6E-01	3.8E-01	***4.0E+00***	NR	NR	NR	NR	NR	NR	NR
alpha-Chlordane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR
beta-BHC	1.0	b		***1.1E+00***	9.5E-01	9.5E-01	***1.0E+00***	9.0E-01	9.5E-01	***1.0E+01***	NR	NR	NR	NR	NR	NR	NR
delta-BHC	NC	NA		NC	NC	NC	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR
Dieldrin	0.50	b		**1.9E+01**	**7.6E+00**	**6.0E+00**	***3.8E+00***	**2.8E+00**	***3.8E+00***	**3.6E+02**	NR	NR	NR	NR	NR	NR	NR
Endosulfan I	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR
Endosulfan II	NC	NA		NC	NC	NC	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR
Endosulfan Sulfate	NC	NA		NC	NC	NC	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR
Endrin	1.0	b		***2.0E+00***	***1.9E+00***	***1.9E+00***	***1.9E+00***	***1.8E+00***	***1.9E+00***	***2.0E+01***	NR	NR	NR	NR	NR	NR	NR
Endrin Aldehyde	NC	NA		NC	NC	NC	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR
Endrin Ketone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR
gamma-BHC (Lindane)	0.050	b		***2.1E+01***	***1.9E+01***	***1.9E+01***	***2.0E+01***	***1.8E+01***	***1.9E+01***	**6.4E+02**	NR	NR	NR	NR	NR	NR	NR
gamma-Chlordane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR
Heptachlor	NC	NA		NC	NC	NC	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR
Heptachlor Epoxide	NC	NA		NC	NC	NC	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR
Methoxychlor	NC	NA		NC	NC	NC	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR
Toxaphene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR
Herbicides (ug/kg)																	
2,4-D	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4-DB	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4,5-T	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4,5-TP (Silvex)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dalapon	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dicamba	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dichlorprop	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dinoseb	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
MCPA	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
MCPP	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

NOTES:
a = ORNL Vegetative Benchmarks (Efroymson*et al*., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
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g = ORNL Soil Invertebrate Benchmark (Efroymson*et al.*, 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
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Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentration
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentration

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	OFF-SITE (Background)				SITE O									
				SOIL-OS-2 08/14/02 0.5 Ft 16.5	SOIL-OS-2 DUP 08/14/02 0.5 Ft 14.1	SOIL-OS-3 08/14/02 0.5 Ft 13.1	SOIL-OS-4 08/15/02 0.5 Ft 12.8	SOIL-O-1 07/10/02 0.5 Ft 6.7	SOIL-O-2 07/10/02 0.5 Ft 12.3	SOIL-O-3 07/10/02 0.5 Ft 13.1	SA-O-1-SS 05/26/05 0.5 Ft NR	SA-O-1-SS-D 05/26/05 0.5 Ft NR	SA-O-2-SS 05/26/05 0.5 Ft NR	SA-O-3-SS 05/26/05 0.5 Ft NR	SA-O-4-SS 05/26/05 0.5 Ft NR	SOIL-O-4-SS 05/26/05 0.5 Ft NR	SOIL-O-4-SS-D 05/26/05 0.5 Ft NR
PCBs (ug/kg)	**Benchmark**																
Total PCBs	40000	a	NP	4.3E-03	3.0E-03	3.3E-03	2.5E-04	**1.8E+01**	2.0E-05	2.7E-01	NR	NR	NR	NR	NR	NR	NR
Dioxins/Furans (ug/kg)																	
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.0010	c	0.010	***1.5E+00***	**3.0E+01**	4.5E-01	4.6E-01	**2.7E+04**	**1.8E+01**	**2.7E+03**	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,6,7,8-HpCDF	0.0010	c	0.010	4.0E-01	***2.7E+00***	5.5E-01	6.5E-01	**3.9E+03**	**2.1E+00**	**5.2E+02**	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8,9-HpCDF	0.0010	c	0.010	1.4E-01	2.7E-01	6.5E-01	7.0E-01	**2.8E+02**	1.1E-01	**4.3E+01**	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	***1.7E+00***	***2.8E+00***	***5.5E+00***	***4.9E+00***	**4.9E+02**	***2.8E+00***	***1.4E+01***	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8-HxCDF	0.0010	c	0.10	7.5E-01	***3.6E+00***	***6.5E+00***	***2.7E+00***	**2.3E+03**	***2.0E+00***	**3.5E+02**	NR	NR	NR	NR	NR	NR	NR
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	***2.0E+00***	***3.0E+01***	***6.0E+00***	***5.0E+00***	**5.6E+03**	***3.2E+00***	**1.0E+03**	NR	NR	NR	NR	NR	NR	NR
1,2,3,6,7,8-HxCDF	0.0010	c	0.10	7.0E-01	***2.6E+00***	***5.5E+00***	***2.8E+00***	**2.8E+02**	***1.9E+00***	**3.3E+01**	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	***1.7E+00***	***4.7E+01***	***5.0E+00***	***4.6E+00***	**8.5E+02**	***2.6E+00***	**1.1E+02**	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8,9-HxCDF	0.0010	c	0.10	***1.2E+00***	***1.1E+00***	***5.5E+00***	***3.8E+00***	**3.3E+02**	3.7E-01	**5.2E+01**	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8-Pentachlorodibenzofuran	0.0010	c	0.050	4.3E-01	6.8E-01	7.3E-01	***2.1E+00***	**1.5E+02**	1.0E-01	***9.5E+00***	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.0010	c	1.0	***1.7E+01***	***1.7E+01***	***3.1E+01***	***1.4E+02***	**1.9E+03**	***1.5E+01***	***5.0E+01***	NR	NR	NR	NR	NR	NR	NR
2,3,4,6,7,8-HxCDF	0.0010	c	0.10	7.0E-01	***2.3E+00***	***4.2E+00***	***4.1E+00***	**6.5E+02**	***2.0E+00***	**8.8E+01**	NR	NR	NR	NR	NR	NR	NR
2,3,4,7,8-PeCDF	0.0010	c	0.50	***4.5E+00***	***7.3E+00***	***7.5E+00***	***2.1E+01***	**3.4E+03**	***1.6E+00***	**3.3E+02**	NR	NR	NR	NR	NR	NR	NR
2,3,7,8-TCDD	0.0010	c	1.0	***1.2E+01***	***1.1E+01***	***1.3E+01***	***3.7E+01***	**1.9E+03**	***1.6E+00***	**1.6E+02**	NR	NR	NR	NR	NR	NR	NR
2,3,7,8-Tetrachlorodibenzofuran	0.0010	c	0.10	***1.3E+00***	***5.0E+00***	***1.7E+00***	***4.2E+00***	**8.0E+02**	3.7E-01	**6.9E+01**	NR	NR	NR	NR	NR	NR	NR
OCDD	0.0010	c	0.00010	2.8E-01	**3.3E+00**	5.5E-02	4.5E-02	**8.9E+02**	**4.4E+00**	**4.4E+02**	NR	NR	NR	NR	NR	NR	NR
OCDF	0.0010	c	0.00010	1.4E-02	2.4E-01	2.1E-02	7.5E-03	**1.4E+02**	1.4E-01	**4.3E+01**	NR	NR	NR	NR	NR	NR	NR
Total HpCDD	0.0010	c	0.010	***1.5E+00***	**5.7E+01**	4.5E-01	***2.1E+00***	**4.6E+04**	**3.6E+01**	**4.7E+03**	NR	NR	NR	NR	NR	NR	NR
Total HpCDF	0.0010	c	0.010	7.0E-01	**1.3E+01**	6.5E-01	7.0E-01	**2.4E+04**	**1.2E+01**	**3.2E+03**	NR	NR	NR	NR	NR	NR	NR
Total HxCDD	0.0010	c	0.10	***2.7E+00***	***4.7E+01***	***6.0E+00***	***4.7E+00***	**2.0E+04**	***4.2E+00***	**3.3E+03**	NR	NR	NR	NR	NR	NR	NR
Total HxCDF	0.0010	c	0.10	***1.5E+00***	***9.5E+00***	***6.5E+00***	***4.2E+00***	**2.6E+04**	***6.0E+01***	**6.5E+03**	NR	NR	NR	NR	NR	NR	NR
Total PeCDD	0.0010	c	1.0	***1.2E+02***	***1.2E+02***	***1.3E+02***	***1.4E+02***	**4.9E+04**	***8.0E+01***	**6.6E+03**	NR	NR	NR	NR	NR	NR	NR
Total PeCDF	0.0010	c	0.50	***6.5E+00***	***3.0E+01***	***7.5E+00***	***2.5E+01***	**2.1E+04**	***2.8E+00***	**2.8E+03**	NR	NR	NR	NR	NR	NR	NR
Total TCDD	0.0010	c	1.0	***1.2E+01***	***5.0E+01***	***1.3E+01***	***6.5E+01***	**2.4E+04**	***4.9E+00***	**2.3E+03**	NR	NR	NR	NR	NR	NR	NR
Total TCDF	0.0010	c	0.10	***1.3E+00***	***5.0E+00***	***1.7E+00***	***4.2E+00***	**7.9E+03**	3.7E-01	**9.8E+02**	NR	NR	NR	NR	NR	NR	NR
Metals (mg/kg)																	
Aluminum	50	a		**1.4E+02**	**1.6E+02**	**1.2E+02**	**1.0E+02**	**1.0E+02**	**1.5E+02**	**1.7E+02**	**1.1E+02**	**8.6E+01**	**1.8E+02**	**1.7E+02**	**1.8E+02**	**2.2E+02**	**2.2E+02**
Antimony	5.0	a		3.8E-01	3.0E-01	1.9E-01	2.1E-01	1.6E-01	1.5E-01	2.1E-01	1.1E-01	1.8E-01	2.2E-01	2.3E-01	1.2E-01	2.4E-01	1.8E-01
Arsenic	10	a		8.8E-01	9.3E-01	6.2E-01	5.4E-01	**1.1E+00**	5.1E-01	6.3E-01	**1.1E+00**	**1.1E+00**	4.9E-01	4.5E-01	6.2E-01	8.3E-01	8.2E-01
Barium	500	a		3.8E-01	4.0E-01	3.4E-01	3.4E-01	6.8E-01	2.0E-01	2.6E-01	6.8E-01	**1.1E+00**	1.7E-01	1.6E-01	2.4E-01	4.2E-01	4.2E-01
Beryllium	10	a		5.7E-02	6.0E-02	4.1E-02	4.0E-02	3.9E-02	4.6E-02	5.4E-02	3.6E-02	3.3E-02	4.9E-02	4.5E-02	5.0E-02	7.5E-02	7.4E-02
Cadmium	4	a		**1.1E+00**	5.3E-01	2.8E-01	8.5E-02	**4.3E+00**	1.4E-01	4.3E-01	**3.5E+00**	**3.3E+00**	6.9E-02	7.0E-02	2.0E-01	**1.4E+00**	**1.4E+00**
Calcium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Chromium	1.0	a		**1.3E+01**	**1.3E+01**	**1.1E+01**	**9.3E+00**	**1.6E+01**	**1.3E+01**	**1.5E+01**	**1.5E+01**	**1.5E+01**	**1.5E+01**	**1.3E+01**	**1.5E+01**	**1.7E+01**	**1.6E+01**
Cobalt	20	a		3.3E-01	3.2E-01	1.7E-01	2.7E-01	3.0E-01	3.3E-01	3.5E-01	2.4E-01	1.8E-01	3.3E-01	3.0E-01	3.6E-01	3.7E-01	3.7E-01
Copper	100	a		**1.5E+00**	4.3E-01	3.0E-01	1.2E-01	**2.7E+00**	2.6E-01	4.0E-01	**2.5E+00**	**3.3E+00**	1.4E-01	1.5E-01	3.2E-01	**1.6E+00**	**1.5E+00**
Iron	200	b	NP	**7.0E+01**	**7.5E+01**	**6.0E+01**	**5.5E+01**	**5.5E+01**	**7.5E+01**	**8.0E+01**	**5.0E+01**	**4.5E+01**	**7.5E+01**	**6.5E+01**	**7.5E+01**	**8.5E+01**	**8.5E+01**
Lead	50	a		**2.6E+00**	**1.5E+00**	**1.6E+00**	6.2E-01	**2.6E+00**	2.8E-01	4.0E-01	**2.6E+00**	**3.4E+00**	1.7E-01	1.6E-01	4.2E-01	**2.2E+00**	**2.0E+00**
Magnesium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Manganese	500	a		8.2E-01	7.6E-01	1.7E-01	5.2E-01	8.4E-01	**1.1E+00**	9.8E-01	2.2E-01	2.0E-01	9.6E-01	8.6E-01	**1.1E+00**	8.0E-01	8.0E-01
Mercury	0.30	a		3.7E-01	2.7E-01	3.1E-01	1.9E-01	**1.4E+02**	1.6E-01	**9.7E+00**	**6.0E+02**	**6.0E+02**	1.1E-01	1.3E-01	1.3E-01	5.0E-01	6.3E-01
Nickel	30	a		9.0E-01	6.0E-01	4.0E-01	4.7E-01	9.3E-01	6.0E-01	6.0E-01	7.7E-01	6.3E-01	5.7E-01	5.3E-01	6.0E-01	7.7E-01	7.3E-01
Potassium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Selenium	1.0	a		6.2E-01	5.0E-01	5.5E-01	5.5E-01	***1.6E+00***	5.5E-01	5.5E-01	**2.3E+00**	**1.0E+01**	***1.4E+00***	***1.4E+00***	***1.4E+00***	***1.4E+00***	***1.5E+00***
Silver	2.0	a		3.4E-01	2.5E-01	2.8E-01	2.8E-01	**1.5E+00**	2.8E-01	2.8E-01	**1.8E+00**	**2.1E+00**	2.8E-01	2.8E-01	2.8E-01	3.0E-01	3.2E-01
Sodium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Thallium	1.0	a		5.5E-01	5.0E-01	5.5E-01	5.5E-01	5.5E-01	5.5E-01	5.5E-01	***1.5E+00***	***1.4E+00***	***1.4E+00***	***1.4E+00***	***1.4E+00***	***1.4E+00***	***1.5E+00***
Vanadium	2.0	a		**1.1E+01**	**1.3E+01**	**1.1E+01**	**9.0E+00**	**9.5E+00**	**1.4E+01**	**1.4E+01**	**8.5E+00**	**7.5E+00**	**1.4E+01**	**1.5E+01**	**1.4E+01**	**1.5E+01**	**1.5E+01**
Zinc	50	a		**8.8E+00**	**5.2E+00**	**4.2E+00**	**1.1E+00**	**1.9E+01**	**1.4E+00**	**2.6E+00**	**2.0E+01**	**1.6E+01**	7.8E-01	7.8E-01	**2.4E+00**	**1.0E+01**	**9.6E+00**

NOTES:
a = ORNL Vegetative Benchmarks (Efromyson*et al*., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
e = Canadian Environmental Quality Guidelines - Residential/Parkland Standards, 2002
f = NOAA Screening Quick Reference Tables, Urban Park/Residential Target, 1999
g = ORNL Soil Invertebrate Benchmark (Efromyson*et al.*, 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
R = Data point was rejected, therefore the hazard quotient could not be calculated
NR = Analyte not analyzed

Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentration
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentration

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	SITE O		SITE P											
				SOIL-O-5-SS 05/26/05 0.5 Ft NR	SOIL-O-6-SS 05/26/05 0.5 Ft NR	SOIL-P-1 07/16/02 0.5 Ft 3.7	SOIL-P-2 07/16/02 0.5 Ft 10	SOIL-P-3 07/17/02 0.5 Ft 3.3	SOIL-P-4 07/16/02 0.5 Ft 8.9	SA-P-1-SS 05/26/05 0.5 Ft NR	SA-P-1-SS-D 05/26/05 0.5 Ft NR	SA-P-2-SS 05/26/05 0.5 Ft NR	AT-P-2-SS 05/26/05 0.5 Ft NR	AT-P-2-SS-D 05/26/05 0.5 Ft NR	AT-P-3-SS 05/26/05 0.5 Ft NR	AT-P-4-SS 05/26/05 0.5 Ft NR	AT-P-5-SS 05/26/05 0.5 Ft NR
VOCs (ug/kg)	**Benchmark**																
1,1,1-Trichloroethane	100	b,i		***2.6E+00***	3.1E-02	4.6E-02	3.6E-02	7.0E-02	4.8E-02	8.9E-03	2.3E-02	NR	2.8E-02	2.8E-02	5.0E-02	2.9E-02	2.1E-02
1,1,2,2-Tetrachloroethane	5000	f		5.1E-02	6.2E-04	9.1E-04	7.1E-04	1.4E-03	9.5E-04	3.6E-04	4.6E-04	NR	5.5E-04	5.5E-04	1.0E-03	5.8E-04	4.1E-04
1,1,2-Trichloroethane	100	b,i		***2.6E+00***	3.1E-02	4.6E-02	3.6E-02	7.0E-02	4.8E-02	1.8E-02	2.3E-02	NR	2.8E-02	2.8E-02	5.0E-02	2.9E-02	2.1E-02
1,1-Dichloroethane	100	b,i		***2.6E+00***	3.1E-02	4.6E-02	3.6E-02	7.0E-02	4.8E-02	1.8E-02	2.3E-02	NR	2.8E-02	2.8E-02	5.0E-02	2.9E-02	2.1E-02
1,1-Dichloroethylene	100	b,i		***2.6E+00***	3.1E-02	4.6E-02	3.6E-02	7.0E-02	4.8E-02	1.8E-02	2.3E-02	NR	2.8E-02	2.8E-02	5.0E-02	2.9E-02	2.1E-02
1,2-Dichloroethane	100	b,i		***2.6E+00***	3.1E-02	4.6E-02	3.6E-02	7.0E-02	4.8E-02	1.8E-02	2.3E-02	NR	2.8E-02	2.8E-02	5.0E-02	2.9E-02	2.1E-02
1,2-Dichloroethene (total)	100	b,i		***5.0E+00***	6.0E-02	9.0E-02	7.0E-02	1.4E-01	9.5E-02	3.6E-02	4.7E-02	NR	5.5E-02	5.5E-02	1.1E-01	6.0E-02	4.1E-02
1,2-Dichloropropane	700000	g		3.6E-04	4.4E-06	6.5E-06	5.1E-06	1.0E-05	6.8E-06	2.6E-06	3.3E-06	NR	3.9E-06	3.9E-06	7.1E-06	4.1E-06	2.9E-06
2-Butanone (MEK)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NR	NC	NC	NC	NC	NC
2-Hexanone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NR	NC	NC	NC	NC	NC
4-Methyl-2-pentanone (MIBK)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NR	NC	NC	NC	NC	NC
Acetone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NR	NC	NC	NC	NC	NC
Benzene	50	b		**2.2E+01**	4.2E-02	7.6E-02	7.1E-02	1.9E-01	9.5E-02	1.8E-02	3.2E-02	NR	5.5E-02	5.5E-02	1.0E-01	2.8E-02	1.6E-01
Bromodichloromethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NR	NC	NC	NC	NC	NC
Bromoform	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NR	NC	NC	NC	NC	NC
Bromomethane	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NC	NR	NC	NC	NC	NC	NC
Carbon Disulfide	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NR	NC	NC	NC	NC	NC
Carbon Tetrachloride	1000000	b		2.6E-04	3.1E-06	4.6E-06	3.6E-06	7.0E-06	4.8E-06	1.8E-06	2.3E-06	NR	2.8E-06	2.8E-06	5.0E-06	2.9E-06	2.1E-06
Chlorobenzene	40000	g		3.5E-01	7.8E-05	1.0E-04	8.9E-05	1.8E-04	1.2E-04	4.5E-05	5.8E-05	1.4E-02	6.9E-05	6.9E-05	1.3E-04	1.4E-04	7.5E-05
Chloroethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NR	NC	NC	NC	NC	NC
Chloroform	5.0	c,i		***5.1E+01***	6.2E-01	9.1E-01	7.1E-01	***1.4E+00***	9.5E-01	3.6E-01	4.6E-01	NR	5.5E-01	5.5E-01	***1.0E+00***	5.8E-01	4.1E-01
Chloromethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NR	NC	NC	NC	NC	NC
cis-1,3-Dichloropropene	5.0	c,i		***5.1E+01***	6.2E-01	9.1E-01	7.1E-01	***1.4E+00***	9.5E-01	3.6E-01	4.6E-01	NR	5.5E-01	5.5E-01	***1.0E+00***	5.8E-01	4.1E-01
Dibromochloromethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NR	NC	NC	NC	NC	NC
Ethylbenzene	50	b		**2.6E+01**	2.6E-02	4.8E-02	5.2E-03	1.4E-01	9.5E-02	1.7E-02	3.0E-02	**1.6E+01**	5.5E-02	5.5E-02	1.0E-01	8.0E-02	1.8E-01
Methylene Chloride	5000	e		6.0E-02	6.2E-04	9.1E-04	7.1E-04	1.4E-03	9.5E-04	3.6E-04	4.6E-04	NR	5.5E-04	5.5E-04	1.0E-03	5.8E-04	4.1E-04
Styrene (Monomer)	300000	a		8.5E-04	1.0E-05	1.5E-05	1.1E-06	2.3E-05	1.6E-05	6.0E-06	7.7E-06	NR	9.2E-06	9.2E-06	1.7E-05	9.7E-06	6.8E-06
Tetrachloroethene	10	b		**1.7E+01**	3.1E-01	6.0E-01	3.1E-01	1.9E-01	4.8E-01	1.8E-01	2.3E-01	**5.9E+03**	2.8E-01	2.8E-01	5.0E-01	2.9E-01	2.0E-01
Toluene	200000	a		3.7E-03	2.1E-05	1.6E-04	1.8E-05	3.5E-05	2.4E-05	1.0E-05	1.7E-05	4.7E-03	1.4E-05	1.4E-05	2.5E-05	1.5E-05	2.9E-05
trans-1,3-Dichloropropene	5.0	c,i		***5.1E+01***	6.2E-01	9.1E-01	7.1E-01	***1.4E+00***	9.5E-01	3.6E-01	4.6E-01	NR	5.5E-01	5.5E-01	***1.0E+00***	5.8E-01	4.1E-01
Trichloroethylene	5.0	c		***5.1E+01***	6.2E-01	3.0E-01	1.6E-01	***1.4E+00***	9.5E-01	3.6E-01	4.6E-01	NR	5.5E-01	5.5E-01	***1.0E+00***	5.8E-01	4.1E-01
Vinyl chloride	10	b		***2.6E+01***	3.1E-01	9.0E-01	7.0E-01	***1.4E+00***	9.5E-01	1.8E-01	2.3E-01	NR	2.8E-01	2.8E-01	5.0E-01	2.9E-01	2.1E-01
Xylenes, Total	50	b		**1.2E+02**	9.4E-02	8.6E-02	1.9E-02	2.8E-01	1.9E-01	7.1E-02	6.6E-02	**7.4E+01**	1.1E-01	1.1E-01	2.1E-01	4.6E-01	7.8E-01
SVOCs (ug/kg)																	
1,2,4-Trichlorobenzene	20000	g		1.1E-02	1.0E-02	1.0E-02	1.0E-02	4.5E-02	9.5E-03	9.8E-03	9.8E-03	2.2E-01	9.0E-03	9.0E-02	1.2E-02	9.5E-02	1.1E-02
1,2-Dichlorobenzene	1.0	c		**1.1E+03**	***2.0E+02***	***2.1E+02***	***2.1E+02***	***9.0E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***4.3E+03***	***1.8E+02***	***1.8E+03***	***2.3E+02***	***1.9E+03***	***2.2E+02***
1,3-Dichlorobenzene	1.0	c		***1.0E+03***	***2.0E+02***	***2.1E+02***	***2.1E+02***	***9.0E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***4.3E+03***	***1.8E+02***	***1.8E+03***	***2.3E+02***	***1.9E+03***	***2.2E+02***
1,4-Dichlorobenzene	20000	g		3.2E-02	1.0E-02	1.0E-02	1.0E-02	4.5E-02	9.5E-03	9.8E-03	9.8E-03	2.2E-01	9.0E-03	9.0E-02	1.2E-02	9.5E-02	1.1E-02
2,2'-Oxybis(1-Chloropropane)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4,5-Trichlorophenol	4000	a		2.5E-01	5.0E-02	5.1E-02	5.1E-02	2.3E-01	4.8E-02	4.9E-02	4.9E-02	***1.1E+00***	4.5E-02	4.5E-01	5.8E-02	4.8E-01	5.5E-02
2,4,6-Trichlorophenol	10000	g		1.3E-01	2.0E-02	2.1E-02	2.1E-02	9.0E-02	1.9E-02	2.0E-02	2.0E-02	4.3E-01	1.8E-02	1.8E-01	2.3E-02	1.9E-01	2.2E-02
2,4-Dichlorophenol	0.50	c		**1.9E+03**	***4.0E+02***	***4.1E+02***	***4.1E+02***	***1.8E+03***	***3.8E+02***	***3.9E+02***	***3.9E+02***	***8.6E+03***	***3.6E+02***	***3.6E+03***	***4.6E+02***	***3.8E+03***	***4.4E+02***
2,4-Dimethylphenol	1.0	c		***1.0E+03***	***2.0E+02***	***2.1E+02***	***2.1E+02***	***9.0E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***4.3E+03***	***1.8E+02***	***1.8E+03***	***2.3E+02***	***1.9E+03***	***2.2E+02***
2,4-Dinitrophenol	20000	a		2.5E-01	5.3E-02	5.3E-02	5.3E-02	2.4E-01	4.8E-02	5.0E-02	5.0E-02	***1.1E+00***	4.8E-02	4.8E-01	NR	5.0E-01	NR
2,4-Dinitrotoluene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,6-Dinitrotoluene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Chloronaphthalene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Chlorophenol	0.50	c		***2.0E+03***	***4.0E+02***	***4.1E+02***	***4.1E+02***	***1.8E+03***	***3.8E+02***	***3.9E+02***	***3.9E+02***	***8.6E+03***	***3.6E+02***	***3.6E+03***	***4.6E+02***	***3.8E+03***	***4.4E+02***
2-Methylnaphthalene	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Methylphenol (o-Cresol)	1.0	c		***1.0E+03***	***2.0E+02***	***2.1E+02***	***2.1E+02***	***9.0E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***4.3E+03***	***1.8E+02***	***1.8E+03***	***2.3E+02***	***1.9E+03***	***2.2E+02***
2-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Nitrophenol	1.0	c		***1.0E+03***	***2.0E+02***	***2.1E+02***	***2.1E+02***	***9.0E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***4.3E+03***	***1.8E+02***	***1.8E+03***	***2.3E+02***	***1.9E+03***	***2.2E+02***
3,3'-Dichlorobenzidine	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
3/4-Methylphenol (m&p-Cresol)	1.0	c		***1.0E+03***	***2.0E+02***	***2.1E+02***	***2.1E+02***	***9.0E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***4.3E+03***	***1.8E+02***	***1.8E+03***	***2.3E+02***	***1.9E+03***	***2.2E+02***
3-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4,6-Dinitro-2-methylphenol	1.0	c		***5.0E+03***	***1.1E+03***	***1.1E+03***	***1.1E+03***	***4.8E+03***	***9.5E+02***	***1.0E+03***	***1.0E+03***	***2.2E+04***	***9.5E+02***	***9.5E+03***	***1.2E+03***	***1.0E+04***	***1.2E+03***
4-Bromophenyl Phenyl Ether	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Chloro-3-methylphenol	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Chloroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Chlorophenyl Phenyl Ether	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Nitrophenol	7000	g		7.1E-01	1.5E-01	1.5E-01	1.5E-01	6.9E-01	1.4E-01	1.4E-01	1.4E-01	***3.1E+00***	1.4E-01	***1.4E+00***	1.7E-01	***1.4E+00***	1.6E-01
Acenaphthene	20000	a		5.0E-02	1.0E-02	1.0E-02	3.8E-03	4.5E-02	9.5E-03	9.8E-03	9.8E-03	2.2E-01	9.0E-03	9.0E-02	1.2E-02	9.5E-02	1.1E-02
Acenaphthylene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Anthracene	100	b		***1.0E+01***	***2.0E+00***	***2.1E+00***	2.3E+00	***9.0E+00***	***1.9E+00***	***2.0E+00***	***2.0E+00***	***4.3E+01***	***1.8E+00***	***1.8E+01***	7.3E-01	***1.9E+01***	***2.2E+00***

NOTES:
a = ORNL Vegetative Benchmarks (Efromyson*et al* ., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
e = Canadian Environmental Quality Guidelines - Residential/Parkland Standards, 2002
f = NOAA Screening Quick Reference Tables, Urban Park/Residential Target, 1999
g = ORNL Soil Invertebrate Benchmark (Efromyson*et al.* , 1997b)

h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
R = Data point was rejected, therefore the hazard quotient could not be calculated
NR = Analyte not analyzed

Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	SITE O		SITE P											
				SOIL-O-5-SS 05/26/05 0.5 Ft	SOIL-O-6-SS 05/26/05 0.5 Ft	SOIL-P-1 07/16/02 0.5 Ft	SOIL-P-2 07/16/02 0.5 Ft	SOIL-P-3 07/17/02 0.5 Ft	SOIL-P-4 07/16/02 0.5 Ft	SA-P-1-SS 05/26/05 0.5 Ft	SA-P-1-SS-D 05/26/05 0.5 Ft	SA-P-2-SS 05/26/05 0.5 Ft	AT-P-2-SS 05/26/05 0.5 Ft	AT-P-2-SS-D 05/26/05 0.5 Ft	AT-P-3-SS 05/26/05 0.5 Ft	AT-P-4-SS 05/26/05 0.5 Ft	AT-P-5-SS 05/26/05 0.5 Ft
SVOCs (ug/kg)	**Benchmark**			NR	NR	3.7	10	3.3	8.9	NR	NR	NR	NR	NR	NR	NR	NR
Benzo(a)anthracene	1.0	c		***1.0E+03***	***2.0E+02***	**2.9E+01**	**6.8E+02**	***9.0E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***4.3E+03***	**1.5E+02**	***1.8E+03***	**2.9E+02**	***1.9E+03***	**1.6E+02**
Benzo(a)pyrene	100	b		***1.0E+01***	***2.0E+00***	4.2E-01	**6.7E+00**	***9.0E+00***	***1.9E+00***	***2.0E+00***	***2.0E+00***	***4.3E+01***	**1.7E+00**	***1.8E+01***	**2.7E+00**	***1.9E+01***	**2.4E+00**
Benzo(b)fluoranthene	1.0	c		***1.0E+03***	***2.0E+02***	**3.2E+01**	**6.8E+02**	***9.0E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***4.3E+03***	**1.6E+02**	***1.8E+03***	**3.4E+02**	***1.9E+03***	**3.3E+02**
Benzo(g,h,i)perylene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Benzo(k)fluoranthene	1.0	c		***1.0E+03***	***2.0E+02***	**3.0E+01**	**5.7E+02**	***9.0E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***4.3E+03***	**1.4E+02**	***1.8E+03***	**3.3E+02**	***1.9E+03***	**3.0E+02**
bis(2-Chloroethoxy)methane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
bis(2-Chloroethyl)ether	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
bis(2-Ethylhexyl)phthalate	30	h		***3.3E+01***	***6.7E+00***	**1.7E+00**	**1.2E+00**	***3.0E+01***	**1.2E+00**	**2.1E+01**	**3.0E+01**	***1.4E+02***	***6.0E+00***	***6.0E+01***	**1.8E+00**	***6.3E+01***	**1.8E+01**
Butyl Benzyl Phthalate	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Carbazole	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Chrysene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dibenzo(a,h)anthracene	1.0	c		***1.0E+03***	***2.0E+02***	**5.9E+01**	**1.1E+02**	***9.0E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***4.3E+03***	***1.8E+02***	***1.8E+03***	***2.3E+02***	***1.9E+03***	***2.2E+02***
Dibenzofuran	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Diethyl Phthalate	100000	a		1.0E-02	2.0E-03	2.1E-03	2.1E-03	9.0E-03	1.9E-03	2.0E-03	2.0E-03	4.3E-02	1.8E-03	1.8E-02	2.3E-03	1.9E-02	2.2E-03
Dimethyl Phthalate	200000	g		5.0E-03	1.0E-03	1.0E-03	1.0E-03	4.5E-03	9.5E-04	9.8E-04	9.8E-04	2.2E-02	9.0E-04	9.0E-03	1.2E-03	9.5E-03	1.1E-03
Di-n-butylphthalate	200000	a	NP	5.0E-03	1.0E-03	1.0E-03	1.0E-03	4.5E-03	9.5E-04	9.8E-04	9.8E-04	2.2E-02	9.0E-04	9.0E-03	3.1E-04	9.5E-03	1.1E-03
Di-n-octylphthalate	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Fluoranthene	100	b		***1.0E+01***	***2.0E+00***	4.0E-01	**1.7E+01**	***9.0E+00***	***1.9E+00***	***2.0E+00***	***2.0E+00***	***4.3E+01***	**3.3E+00**	***1.8E+01***	**7.6E+00**	***1.9E+01***	**5.6E+00**
Fluorene	30000	g		3.3E-02	6.7E-03	6.8E-03	2.2E-03	3.0E-02	6.3E-03	6.5E-03	6.5E-03	1.4E-01	6.0E-03	6.0E-02	7.7E-03	6.3E-02	7.3E-03
Hexachlorobenzene	2.0	c		**2.6E+02**	***1.0E+02***	***1.0E+02***	***1.0E+02***	***4.5E+02***	***9.5E+01***	***9.8E+01***	***9.8E+01***	***2.2E+03***	***9.0E+01***	***9.0E+02***	***1.2E+02***	***9.5E+02***	***1.1E+02***
Hexachlorobutadiene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Hexachlorocyclopentadiene	10000	a		1.0E-01	2.0E-02	2.1E-02	2.1E-02	9.0E-02	1.9E-02	2.0E-02	2.0E-02	4.3E-01	1.8E-02	1.8E-01	2.3E-02	1.9E-01	2.2E-02
Hexachloroethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Indeno(1,2,3-cd)pyrene	1.0	c		***1.0E+03***	***2.0E+02***	**6.6E+01**	**2.4E+02**	***9.0E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***4.3E+03***	**1.0E+02**	***1.8E+03***	**1.6E+02**	***1.9E+03***	**1.9E+02**
Isophorone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Naphthalene	600	e		***1.7E+00***	3.3E-01	3.4E-01	3.4E-01	***1.5E+00***	3.2E-01	3.3E-01	3.3E-01	***7.2E+00***	3.0E-01	***3.0E+00***	3.8E-01	***3.2E+00***	3.7E-01
Nitrobenzene	40000	g		2.5E-02	5.0E-03	5.1E-03	5.1E-03	2.3E-02	4.8E-03	4.9E-03	4.9E-03	1.1E-01	4.5E-03	4.5E-02	5.8E-03	4.8E-02	5.5E-03
N-Nitroso-di-n-propylamine	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
N-Nitrosodiphenylamine	20000	g		5.0E-02	1.0E-02	1.0E-02	1.0E-02	4.5E-02	9.5E-03	9.8E-03	9.8E-03	2.2E-01	9.0E-03	9.0E-02	1.2E-02	9.5E-02	1.1E-02
Pentachlorophenol	3000	a		**1.6E+02**	1.3E-02	2.4E-03	1.4E-03	9.3E-03	3.7E-03	2.6E-01	6.0E-03	2.0E-02	4.0E-03	1.5E-03	2.0E-03	6.0E-02	1.9E-01
Phenanthrene	5.0	c		***2.0E+02***	***4.0E+01***	**4.8E+00**	**2.2E+02**	***1.8E+02***	***3.8E+01***	**7.2E+00**	***3.9E+01***	***8.6E+02***	**3.4E+01**	***3.6E+02***	**8.0E+01**	***3.8E+02***	**4.6E+01**
Phenol	70000	a		1.4E-02	2.9E-03	2.9E-03	5.1E-03	1.3E-02	2.7E-03	2.8E-03	2.8E-03	6.1E-02	2.6E-03	2.6E-02	3.3E-03	2.7E-02	3.1E-03
Pyrene	10	c		***1.0E+02***	***2.0E+01***	**5.1E+00**	**1.8E+02**	***9.0E+01***	***1.9E+01***	**3.9E+00**	**4.0E+00**	***4.3E+02***	**2.9E+01**	**2.3E+01**	**5.7E+01**	***1.9E+02***	**4.0E+01**
Pesticides (ug/kg)																	
4,4'-DDD	10	d		NR	NR	***4.1E+00***	2.1E-01	***1.9E+00***	***3.8E+00***	NR	NR	NR	NR	NR	NR	NR	NR
4,4'-DDE	10	d		NR	NR	***4.1E+00***	3.0E-01	***1.9E+00***	***3.8E+00***	NR	NR	NR	NR	NR	NR	NR	NR
4,4'-DDT	10	c		NR	NR	**1.7E+00**	8.1E-01	9.1E-01	**1.1E+02**	NR	NR	NR	NR	NR	NR	NR	NR
Aldrin	2.5	b		NR	NR	***8.4E+00***	4.2E-01	***3.8E+00***	***7.8E+00***	NR	NR	NR	NR	NR	NR	NR	NR
alpha-BHC	2.5	b		NR	NR	***8.4E+00***	4.2E-01	***3.8E+00***	***7.8E+00***	NR	NR	NR	NR	NR	NR	NR	NR
alpha-Chlordane	NC	NA		NR	NR	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR	NR
beta-BHC	1.0	b		NR	NR	***2.1E+01***	***1.1E+00***	***9.5E+00***	***2.0E+01***	NR	NR	NR	NR	NR	NR	NR	NR
delta-BHC	NC	NA		NR	NR	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR	NR
Dieldrin	0.50	b		NR	NR	***8.1E+01***	**4.0E+00**	**6.0E+00**	***7.5E+01***	NR	NR	NR	NR	NR	NR	NR	NR
Endosulfan I	NC	NA	NP	NR	NR	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR	NR
Endosulfan II	NC	NA		NR	NR	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR	NR
Endosulfan Sulfate	NC	NA		NR	NR	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR	NR
Endrin	1.0	b		NR	NR	***4.1E+01***	***2.1E+00***	***1.9E+01***	***3.8E+01***	NR	NR	NR	NR	NR	NR	NR	NR
Endrin Aldehyde	NC	NA		NR	NR	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR	NR
Endrin Ketone	NC	NA		NR	NR	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR	NR
gamma-BHC (Lindane)	0.050	b		NR	NR	***4.2E+02***	***2.1E+01***	***1.9E+02***	***3.9E+02***	NR	NR	NR	NR	NR	NR	NR	NR
gamma-Chlordane	NC	NA		NR	NR	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR	NR
Heptachlor	NC	NA		NR	NR	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR	NR
Heptachlor Epoxide	NC	NA		NR	NR	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR	NR
Methoxychlor	NC	NA		NR	NR	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR	NR
Toxaphene	NC	NA		NR	NR	NC	NC	NC	NC	NR	NR	NR	NR	NR	NR	NR	NR
Herbicides (ug/kg)																	
2,4-D	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4-DB	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4,5-T	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4,5-TP (Silvex)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dalapon	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dicamba	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dichlorprop	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dinoseb	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
MCPA	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
MCPP	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

NOTES:
a = ORNL Vegetative Benchmarks (Efromyson*et al* ., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
e = Canadian Environmental Quality Guidelines - Residential/Parkland Standards, 2002
f = NOAA Screening Quick Reference Tables, Urban Park/Residential Target, 1999
g = ORNL Soil Invertebrate Benchmark (Efromyson*et al.* , 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
R = Data point was rejected, therefore the hazard quotient could not be calculated
NR = Analyte not analyzed

Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	SITE O		SITE P											
				SOIL-O-5-SS 05/26/05 0.5 Ft NR	SOIL-O-6-SS 05/26/05 0.5 Ft NR	SOIL-P-1 07/16/02 0.5 Ft 3.7	SOIL-P-2 07/16/02 0.5 Ft 10	SOIL-P-3 07/17/02 0.5 Ft 3.3	SOIL-P-4 07/16/02 0.5 Ft 8.9	SA-P-1-SS 05/26/05 0.5 Ft NR	SA-P-1-SS-D 05/26/05 0.5 Ft NR	SA-P-2-SS 05/26/05 0.5 Ft NR	AT-P-2-SS 05/26/05 0.5 Ft NR	AT-P-2-SS-D 05/26/05 0.5 Ft NR	AT-P-3-SS 05/26/05 0.5 Ft NR	AT-P-4-SS 05/26/05 0.5 Ft NR	AT-P-5-SS 05/26/05 0.5 Ft NR
PCBs (ug/kg)	**Benchmark**																
Total PCBs	40000	a	NP	NR	NR	2.6E-04	3.4E-04	2.8E-04	1.8E-01	NR	NR	NR	NR	NR	NR	NR	NR
Dioxins/Furans (ug/kg)																	
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.0010	c	0.010	NR	NR	**1.1E+01**	**1.9E+02**	**3.3E+01**	***1.7E+00***	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,6,7,8-HpCDF	0.0010	c	0.010	NR	NR	***1.3E+00***	**1.2E+01**	***2.3E+00***	***1.3E+00***	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8,9-HpCDF	0.0010	c	0.010	NR	NR	4.9E-01	5.0E-01	6.5E-01	6.5E-01	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	NR	NR	***4.0E+00***	***8.0E+00***	***1.4E+01***	***9.0E+00***	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8-HxCDF	0.0010	c	0.10	NR	NR	***5.5E+00***	***4.6E+00***	***4.3E+00***	***6.0E+00***	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	NR	NR	***5.5E+00***	***2.7E+01***	***1.3E+01***	***9.5E+00***	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,6,7,8-HxCDF	0.0010	c	0.10	NR	NR	***2.6E+00***	***4.4E+00***	***2.3E+00***	***5.5E+00***	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	NR	NR	***4.2E+00***	***1.2E+01***	***1.1E+01***	***9.5E+00***	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8,9-HxCDF	0.0010	c	0.10	NR	NR	***5.5E+00***	***3.8E+00***	***5.5E+00***	***6.0E+00***	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8-Pentachlorodibenzofuran	0.0010	c	0.050	NR	NR	9.8E-01	***3.3E+00***	***2.5E+00***	***1.6E+00***	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.0010	c	1.0	NR	NR	***4.1E+01***	***2.4E+02***	***1.2E+02***	***1.1E+02***	NR	NR	NR	NR	NR	NR	NR	NR
2,3,4,6,7,8-HxCDF	0.0010	c	0.10	NR	NR	***3.2E+00***	***3.9E+00***	***4.7E+00***	***5.5E+00***	NR	NR	NR	NR	NR	NR	NR	NR
2,3,4,7,8-PeCDF	0.0010	c	0.50	NR	NR	***1.4E+01***	***7.3E+01***	***3.8E+01***	***3.0E+01***	NR	NR	NR	NR	NR	NR	NR	NR
2,3,7,8-TCDD	0.0010	c	1.0	NR	NR	***1.9E+01***	***8.0E+01***	***6.0E+01***	***4.9E+01***	NR	NR	NR	NR	NR	NR	NR	NR
2,3,7,8-Tetrachlorodibenzofuran	0.0010	c	0.10	NR	NR	***1.4E+00***	***5.5E+00***	***6.0E+00***	***3.5E+00***	NR	NR	NR	NR	NR	NR	NR	NR
OCDD	0.0010	c	0.00010	NR	NR	6.5E-01	**5.4E+01**	**4.3E+00**	2.3E-01	NR	NR	NR	NR	NR	NR	NR	NR
OCDF	0.0010	c	0.00010	NR	NR	6.5E-02	**3.3E+00**	7.5E-01	4.6E-02	NR	NR	NR	NR	NR	NR	NR	NR
Total HpCDD	0.0010	c	0.010	NR	NR	**2.0E+01**	**3.8E+02**	**5.9E+01**	***1.7E+00***	NR	NR	NR	NR	NR	NR	NR	NR
Total HpCDF	0.0010	c	0.010	NR	NR	**6.6E+00**	**6.6E+01**	**1.3E+01**	***1.3E+00***	NR	NR	NR	NR	NR	NR	NR	NR
Total HxCDD	0.0010	c	0.10	NR	NR	***5.5E+00***	**8.5E+01**	***1.5E+01***	***1.2E+01***	NR	NR	NR	NR	NR	NR	NR	NR
Total HxCDF	0.0010	c	0.10	NR	NR	***5.5E+00***	***4.0E+01***	***9.0E+00***	***8.0E+00***	NR	NR	NR	NR	NR	NR	NR	NR
Total PeCDD	0.0010	c	1.0	NR	NR	***9.0E+01***	***2.4E+02***	***1.5E+02***	***2.7E+02***	NR	NR	NR	NR	NR	NR	NR	NR
Total PeCDF	0.0010	c	0.50	NR	NR	***1.4E+01***	***7.3E+01***	***9.0E+01***	***6.3E+01***	NR	NR	NR	NR	NR	NR	NR	NR
Total TCDD	0.0010	c	1.0	NR	NR	***1.9E+01***	***8.0E+01***	***6.0E+01***	***4.9E+01***	NR	NR	NR	NR	NR	NR	NR	NR
Total TCDF	0.0010	c	0.10	NR	NR	***1.4E+00***	***7.5E+00***	***6.0E+00***	***9.5E+00***	NR	NR	NR	NR	NR	NR	NR	NR
Metals (mg/kg)																	
Aluminum	50	a		**1.1E+02**	**1.3E+02**	**8.0E+01**	**1.2E+02**	**6.4E+01**	**1.2E+02**	**1.7E+02**	**1.7E+02**	**5.8E+01**	**1.4E+02**	**1.4E+02**	**7.2E+01**	**1.1E+02**	**9.2E+01**
Antimony	5.0	a		3.2E-01	2.3E-01	3.2E-01	1.2E-01	1.1E-01	1.9E-01	2.3E-01	2.2E-01	2.0E-01	1.3E-01	1.8E-01	2.6E-01	2.0E-01	2.4E-01
Arsenic	10	a		8.6E-01	5.3E-01	**2.6E+00**	9.4E-01	**1.7E+00**	4.0E-01	4.8E-01	4.4E-01	**1.5E+00**	7.2E-01	7.5E-01	**1.4E+00**	**1.5E+00**	7.4E-01
Barium	500	a		6.6E-01	3.6E-01	2.4E-01	3.6E-01	1.7E-01	1.5E-01	3.0E-01	3.2E-01	2.0E-01	3.0E-01	2.8E-01	1.7E-01	**1.4E+00**	1.7E-01
Beryllium	10	a		5.1E-02	4.2E-02	1.8E-01	8.5E-02	1.5E-01	4.2E-02	5.0E-02	5.3E-02	1.1E-01	6.3E-02	6.9E-02	1.0E-01	1.3E-01	3.3E-02
Cadmium	4	a		**8.0E+00**	1.0E-01	5.0E-01	7.5E-01	2.5E-01	1.6E-01	2.1E-01	2.2E-01	2.8E-01	9.0E-01	9.8E-01	**6.3E+00**	**1.2E+00**	**1.4E+00**
Calcium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Chromium	1.0	a		**4.2E+01**	**1.0E+01**	**1.9E+01**	**1.4E+01**	**1.6E+01**	**1.3E+01**	**1.3E+01**	**1.4E+01**	**2.7E+01**	**1.4E+01**	**1.5E+01**	**1.7E+01**	**1.0E+02**	**1.3E+01**
Cobalt	20	a		3.4E-01	2.6E-01	6.5E-01	3.8E-01	4.9E-01	3.1E-01	2.6E-01	3.0E-01	2.9E-01	3.1E-01	3.3E-01	3.9E-01	5.0E-01	1.8E-01
Copper	100	a		**6.8E+00**	1.5E-01	6.4E-01	5.9E-01	5.1E-01	2.1E-01	1.8E-01	1.9E-01	4.1E-01	5.2E-01	5.7E-01	**2.5E+00**	**1.4E+00**	2.6E-01
Iron	200	b	NP	**6.0E+01**	**5.5E+01**	**4.6E+01**	**5.5E+01**	**3.7E+01**	**6.0E+01**	**6.0E+01**	**6.0E+01**	**8.5E+01**	**5.5E+01**	**5.5E+01**	**3.2E+01**	**1.6E+02**	**3.2E+01**
Lead	50	a		**3.0E+00**	2.8E-01	**1.5E+00**	**3.4E+00**	**1.1E+00**	3.0E-01	**4.0E+01**	**1.4E+00**	**2.2E+00**	**2.2E+00**	**2.6E+00**	**3.0E+00**	**2.6E+00**	**2.0E+00**
Magnesium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Manganese	500	a		5.2E-01	5.2E-01	6.2E-02	7.2E-01	1.6E-01	7.8E-01	6.6E-01	7.8E-01	2.0E-01	5.2E-01	5.2E-01	4.6E-01	**5.4E+00**	3.8E-01
Mercury	0.30	a		**7.0E+01**	9.7E-02	7.7E-01	2.4E-01	2.9E-01	2.3E-01	2.0E-01	2.4E-01	**1.8E+00**	7.7E-01	7.0E-01	4.0E-01	**7.7E+00**	**1.9E+01**
Nickel	30	a		**4.7E+00**	4.3E-01	**1.6E+00**	7.0E-01	8.3E-01	5.7E-01	5.0E-01	5.3E-01	7.0E-01	6.0E-01	6.3E-01	7.3E-01	**4.3E+00**	4.0E-01
Potassium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Selenium	1.0	a		**3.1E+00**	***1.5E+00***	**7.0E+00**	5.5E-01	**1.6E+00**	4.8E-01	***1.5E+00***	***1.4E+00***	**1.6E+00**	***1.4E+00***	***1.3E+00***	**2.2E+00**	**1.8E+00**	***1.6E+00***
Silver	2.0	a		**2.1E+00**	3.0E-01	1.1E-01	1.2E-01	6.5E-02	2.4E-01	1.3E-01	2.8E-01	3.0E-01	1.1E-01	1.3E-01	7.0E-01	4.6E-01	3.0E-01
Sodium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Thallium	1.0	a		***1.4E+00***	***1.5E+00***	**1.3E+00**	5.5E-01	5.0E-01	4.8E-01	***1.5E+00***	***1.4E+00***	***1.6E+00***	***1.4E+00***	***1.3E+00***	***1.7E+00***	***1.3E+00***	***1.6E+00***
Vanadium	2.0	a		**8.0E+00**	**1.0E+01**	**2.2E+01**	**1.1E+01**	**1.3E+01**	**1.3E+01**	**1.2E+01**	**1.2E+01**	**1.3E+01**	**1.2E+01**	**1.3E+01**	**1.2E+01**	**1.3E+02**	**7.5E+00**
Zinc	50	a		**4.8E+01**	**1.2E+00**	**4.0E+00**	**7.8E+00**	**3.8E+00**	**1.7E+00**	**2.4E+00**	**2.6E+00**	**4.0E+00**	**9.4E+00**	**9.6E+00**	**6.2E+01**	**5.4E+01**	**1.3E+01**

NOTES:
a = ORNL Vegetative Benchmarks (Efromyson*et al* ., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
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g = ORNL Soil Invertebrate Benchmark (Efromyson*et al.* , 1997b)

h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
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R = Data point was rejected, therefore the hazard quotient could not be calculated
NR = Analyte not analyzed

Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	SITE Q SOIL-Q-9 07/26/02 0.5 Ft 19.8	SOIL-Q-10 07/26/02 0.5 Ft 14.9	SOIL-Q-10 DUP 07/26/02 0.5 Ft 12.3	SOIL-Q-11 07/22/02 0.5 Ft 33.6	SOIL-Q-11 DUP 07/22/02 0.5 Ft 30.6	SOIL-Q-12 07/22/02 0.5 Ft 20.8	SOIL-Q-13 10/07/02 0.5 Ft 22.6	SOIL-Q-14 10/07/02 0.5 Ft 18.6	SOIL-Q-15 10/07/02 0.5 Ft 26.1	SOIL-Q-16 10/07/02 0.5 Ft 19.1	SOIL-Q-17 10/07/02 0.5 Ft 15.8	SOIL-Q-18 10/07/02 0.5 Ft 14.9	SOIL-Q-19 10/07/02 0.5 Ft 20.7	SOIL-Q-20 10/07/02 0.5 Ft 22.2
VOCs (ug/kg)	**Benchmark**																
1,1,1-Trichloroethane	100	b,i		3.8E-02	4.6E-02	4.3E-02	6.0E-02	5.0E-02	3.1E-02	3.5E-02	3.1E-02	3.8E-02	3.1E-02	3.2E-02	3.4E-02	2.9E-02	3.7E-02
1,1,2,2-Tetrachloroethane	5000	f		7.6E-04	9.1E-04	8.5E-04	1.2E-03	1.0E-03	6.2E-04	7.0E-04	6.2E-04	7.5E-04	6.1E-04	6.4E-04	6.8E-04	5.8E-04	7.3E-04
1,1,2-Trichloroethane	100	b,i		3.8E-02	4.6E-02	4.3E-02	6.0E-02	5.0E-02	3.1E-02	3.5E-02	3.1E-02	3.8E-02	3.1E-02	3.2E-02	3.4E-02	2.9E-02	3.7E-02
1,1-Dichloroethane	100	b,i		3.8E-02	4.6E-02	4.3E-02	6.0E-02	5.0E-02	3.1E-02	3.5E-02	3.1E-02	3.8E-02	3.1E-02	3.2E-02	3.4E-02	2.9E-02	3.7E-02
1,1-Dichloroethylene	100	b,i		3.8E-02	4.6E-02	4.3E-02	6.0E-02	5.0E-02	3.1E-02	3.5E-02	3.1E-02	3.8E-02	3.1E-02	3.2E-02	3.4E-02	2.9E-02	3.7E-02
1,2-Dichloroethane	100	b,i		3.8E-02	4.6E-02	4.3E-02	6.0E-02	5.0E-02	3.1E-02	3.5E-02	3.1E-02	3.8E-02	3.1E-02	3.2E-02	3.4E-02	2.9E-02	3.7E-02
1,2-Dichloroethene (total)	100	b,i		7.5E-02	9.0E-02	8.5E-02	1.3E-01	1.1E-01	6.0E-02	7.0E-02	6.0E-02	7.5E-02	6.0E-02	6.5E-02	7.0E-02	6.0E-02	7.5E-02
1,2-Dichloropropane	700000	g		5.4E-06	6.5E-06	6.1E-06	8.6E-06	7.1E-06	4.4E-06	5.0E-06	4.4E-06	5.4E-06	4.4E-06	4.6E-06	4.9E-06	4.1E-06	5.2E-06
2-Butanone (MEK)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Hexanone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Methyl-2-pentanone (MIBK)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Acetone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Benzene	50	b		7.6E-02	9.1E-02	8.5E-02	1.1E-01	1.0E-01	6.2E-02	7.0E-02	6.2E-02	7.5E-02	3.6E-02	3.0E-02	4.8E-02	5.8E-02	3.0E-02
Bromodichloromethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Bromoform	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Bromomethane	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Carbon Disulfide	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Carbon Tetrachloride	1000000	b		3.8E-06	4.6E-06	4.3E-06	6.0E-06	5.0E-06	3.1E-06	3.5E-06	3.1E-06	3.8E-06	3.1E-06	3.2E-06	3.4E-06	2.9E-06	3.7E-06
Chlorobenzene	40000	g		9.5E-05	1.1E-04	1.1E-04	1.1E-03	2.5E-04	7.8E-05	8.8E-05	7.8E-05	9.4E-05	7.6E-05	1.7E-05	9.0E-06	7.3E-05	2.8E-05
Chloroethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Chloroform	5.0	c,i		7.6E-01	9.1E-01	8.5E-01	3.6E-01	***1.0E+00***	6.2E-01	7.0E-01	6.2E-01	7.5E-01	6.1E-01	6.4E-01	6.8E-01	5.8E-01	7.3E-01
Chloromethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
cis-1,3-Dichloropropene	5.0	c,i		7.6E-01	9.1E-01	8.5E-01	***1.2E+00***	***1.0E+00***	6.2E-01	7.0E-01	6.2E-01	7.5E-01	6.1E-01	6.4E-01	6.8E-01	5.8E-01	7.3E-01
Dibromochloromethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Ethylbenzene	50	b		7.6E-03	9.1E-02	8.5E-02	1.0E-01	4.2E-01	6.2E-02	7.0E-02	1.0E-02	4.6E-03	1.5E-02	1.4E-02	1.0E-02	9.0E-03	9.6E-03
Methylene Chloride	5000	e		7.6E-04	9.1E-04	8.5E-04	1.2E-03	1.0E-03	6.2E-04	7.0E-04	6.2E-04	7.5E-04	6.1E-04	6.4E-04	6.8E-04	5.8E-04	7.2E-04
Styrene (Monomer)	300000	a		1.3E-05	1.5E-05	1.4E-05	2.0E-05	1.7E-05	1.0E-05	1.2E-05	1.0E-05	1.3E-05	1.0E-05	1.1E-05	1.1E-05	9.7E-06	1.2E-05
Tetrachloroethene	10	b		2.1E-01	6.0E-02	4.7E-02	9.6E-02	5.0E-01	3.1E-01	3.5E-01	3.1E-01	3.8E-01	3.1E-01	3.2E-01	3.4E-01	2.9E-01	3.7E-01
Toluene	200000	a		1.9E-05	2.3E-05	2.1E-05	3.0E-05	2.5E-05	1.6E-05	6.0E-06	9.0E-06	6.5E-06	2.7E-05	1.7E-05	2.1E-05	5.0E-06	9.0E-05
trans-1,3-Dichloropropene	5.0	c,i		7.6E-01	9.1E-01	8.5E-01	***1.2E+00***	***1.0E+00***	6.2E-01	7.0E-01	6.2E-01	7.5E-01	6.1E-01	6.4E-01	6.8E-01	5.8E-01	7.3E-01
Trichloroethylene	5.0	c		3.4E-01	2.4E-01	2.6E-01	***1.2E+00***	***1.0E+00***	6.2E-01	7.0E-01	6.2E-01	7.5E-01	6.1E-01	6.4E-01	6.8E-01	5.8E-01	7.3E-01
Vinyl chloride	10	b		7.5E-01	9.0E-01	8.5E-01	***1.3E+00***	***1.1E+00***	6.0E-01	7.0E-01	6.0E-01	7.5E-01	6.0E-01	6.5E-01	7.0E-01	6.0E-01	7.5E-01
Xylenes, Total	50	b		2.4E-02	1.7E-02	1.9E-02	**1.3E+00**	**5.0E+00**	1.2E-01	1.5E-02	5.2E-02	1.6E-02	4.8E-02	3.4E-02	1.6E-02	1.1E-02	3.6E-02
SVOCs (ug/kg)																	
1,2,4-Trichlorobenzene	20000	g		1.1E-02	1.0E-02	9.8E-02	1.2E-02	1.2E-02	1.0E-02	1.2E-02	1.0E-02	1.1E-02	1.1E-02	1.0E-02	9.5E-03	1.1E-02	1.1E-02
1,2-Dichlorobenzene	1.0	c		***2.1E+02***	***2.1E+02***	***2.0E+03***	**3.1E+01**	**3.1E+01**	***2.1E+02***	***2.3E+02***	***2.0E+02***	***2.2E+02***	***2.1E+02***	***2.0E+02***	***1.9E+02***	***2.1E+02***	***2.2E+02***
1,3-Dichlorobenzene	1.0	c		***2.1E+02***	***2.1E+02***	***2.0E+03***	***2.4E+02***	***2.4E+02***	***2.1E+02***	***2.3E+02***	***2.0E+02***	***2.2E+02***	***2.1E+02***	***2.0E+02***	***1.9E+02***	***2.1E+02***	***2.2E+02***
1,4-Dichlorobenzene	20000	g		1.1E-02	1.0E-02	9.8E-02	2.2E-02	1.4E-02	1.0E-02	1.2E-02	1.0E-02	1.1E-02	1.1E-02	1.0E-02	9.5E-03	1.1E-02	1.1E-02
2,2'-Oxybis(1-Chloropropane)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4,5-Trichlorophenol	4000	a		5.3E-02	5.1E-02	4.9E-01	5.9E-02	6.0E-02	5.1E-02	5.8E-02	5.0E-02	5.5E-02	5.3E-02	5.0E-02	4.8E-02	5.3E-02	5.4E-02
2,4,6-Trichlorophenol	10000	g		2.1E-02	2.1E-02	2.0E-01	2.4E-02	2.4E-02	2.1E-02	2.3E-02	2.0E-02	2.2E-02	2.1E-02	2.0E-02	1.9E-02	2.1E-02	2.2E-02
2,4-Dichlorophenol	0.50	c		***4.2E+02***	***4.1E+02***	***3.9E+03***	***4.7E+02***	***4.8E+02***	***4.1E+02***	***4.6E+02***	***4.0E+02***	***4.4E+02***	***4.2E+02***	***4.0E+02***	***3.8E+02***	***4.2E+02***	***4.3E+02***
2,4-Dimethylphenol	1.0	c		***2.1E+02***	***2.1E+02***	***2.0E+03***	***2.4E+02***	***2.4E+02***	***2.1E+02***	***2.3E+02***	***2.0E+02***	***2.2E+02***	***2.1E+02***	***2.0E+02***	***1.9E+02***	***2.1E+02***	***2.2E+02***
2,4-Dinitrophenol	20000	a		5.5E-02	5.3E-02	5.0E-01	6.0E-02	6.3E-02	5.3E-02	6.0E-02	5.3E-02	5.8E-02	5.5E-02	5.3E-02	5.0E-02	5.5E-02	5.5E-02
2,4-Dinitrotoluene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,6-Dinitrotoluene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Chloronaphthalene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Chlorophenol	0.50	c		***4.2E+02***	***4.1E+02***	***3.9E+03***	***4.7E+02***	***4.8E+02***	***4.1E+02***	***4.6E+02***	***4.0E+02***	***4.4E+02***	***4.2E+02***	***4.0E+02***	***3.8E+02***	***4.2E+02***	***4.3E+02***
2-Methylnaphthalene	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Methylphenol (o-Cresol)	1.0	c		***2.1E+02***	***2.1E+02***	***2.0E+03***	***2.4E+02***	***2.4E+02***	***2.1E+02***	***2.3E+02***	***2.0E+02***	***2.2E+02***	***2.1E+02***	***2.0E+02***	***1.9E+02***	***2.1E+02***	***2.2E+02***
2-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Nitrophenol	1.0	c		***2.1E+02***	***2.1E+02***	***2.0E+03***	***2.4E+02***	***2.4E+02***	***2.1E+02***	***2.3E+02***	***2.0E+02***	***2.2E+02***	***2.1E+02***	***2.0E+02***	***1.9E+02***	***2.1E+02***	***2.2E+02***
3,3'-Dichlorobenzidine	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
3/4-Methylphenol (m&p-Cresol)	1.0	c		***2.1E+02***	***2.1E+02***	***2.0E+03***	***2.4E+02***	***2.4E+02***	***2.1E+02***	***2.3E+02***	***2.0E+02***	***2.2E+02***	***2.1E+02***	***2.0E+02***	***1.9E+02***	***2.1E+02***	***2.2E+02***
3-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4,6-Dinitro-2-methylphenol	1.0	c		***1.1E+03***	***1.1E+03***	***1.0E+04***	***1.2E+03***	***1.3E+03***	***1.1E+03***	***1.2E+03***	***1.1E+03***	***1.2E+03***	***1.1E+03***	***1.1E+03***	***1.0E+03***	***1.1E+03***	***1.1E+03***
4-Bromophenyl Phenyl Ether	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Chloro-3-methylphenol	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Chloroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Chlorophenyl Phenyl Ether	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Nitrophenol	7000	g		1.6E-01	1.5E-01	***1.4E+00***	1.7E-01	1.8E-01	1.5E-01	1.7E-01	1.5E-01	1.6E-01	1.6E-01	1.5E-01	1.4E-01	1.6E-01	1.6E-01
Acenaphthene	20000	a		2.6E-03	1.9E-03	1.3E-02	3.2E-03	6.5E-03	1.0E-02	1.2E-02	1.0E-02	1.1E-02	1.1E-02	1.0E-02	9.5E-03	1.1E-02	1.1E-02
Acenaphthylene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Anthracene	100	b		**3.4E+00**	**2.0E+00**	**1.4E+01**	**2.3E+00**	**8.2E+00**	***2.1E+00***	***2.3E+00***	***2.0E+00***	6.5E-01	***2.1E+00***	***2.0E+00***	***1.9E+00***	***2.1E+00***	***2.2E+00***

NOTES:
a = ORNL Vegetative Benchmarks (Efromyson*et al*., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
e = Canadian Environmental Quality Guidelines - Residential/Parkland Standards, 2002
f = NOAA Screening Quick Reference Tables, Urban Park/Residential Target, 1999
g = ORNL Soil Invertebrate Benchmark (Efromyson*et al.*, 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
R = Data point was rejected, therefore the hazard quotient could not be calculated
NR = Analyte not analyzed

Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentration
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	SITE Q SOIL-Q-9 07/26/02 0.5 Ft 19.8	SOIL-Q-10 07/26/02 0.5 Ft 14.9	SOIL-Q-10 DUP 07/26/02 0.5 Ft 12.3	SOIL-Q-11 07/22/02 0.5 Ft 33.6	SOIL-Q-11 DUP 07/22/02 0.5 Ft 30.6	SOIL-Q-12 07/22/02 0.5 Ft 20.8	SOIL-Q-13 10/07/02 0.5 Ft 22.6	SOIL-Q-14 10/07/02 0.5 Ft 18.6	SOIL-Q-15 10/07/02 0.5 Ft 26.1	SOIL-Q-16 10/07/02 0.5 Ft 19.1	SOIL-Q-17 10/07/02 0.5 Ft 15.8	SOIL-Q-18 10/07/02 0.5 Ft 14.9	SOIL-Q-19 10/07/02 0.5 Ft 20.7	SOIL-Q-20 10/07/02 0.5 Ft 22.2
SVOCs (ug/kg)	**Benchmark**																
Benzo(a)anthracene	1.0	c		**1.8E+03**	**5.3E+02**	**4.5E+03**	**7.4E+02**	**2.1E+03**	**3.0E+01**	***2.3E+02***	***2.0E+02***	**8.5E+01**	**6.5E+01**	**2.1E+02**	**4.5E+01**	**4.1E+01**	**4.5E+01**
Benzo(a)pyrene	100	b		**1.8E+01**	**6.5E+00**	**5.3E+01**	**6.8E+00**	**1.9E+01**	***2.1E+00***	***2.3E+00***	***2.0E+00***	9.2E-01	7.5E-01	**1.8E+00**	4.8E-01	4.6E-01	4.0E-01
Benzo(b)fluoranthene	1.0	c		**3.3E+03**	**5.8E+02**	**4.8E+03**	**7.5E+02**	**2.2E+03**	**3.3E+01**	***2.3E+02***	***2.0E+02***	***2.2E+02***	**6.9E+01**	**2.1E+02**	***1.9E+02***	**5.6E+01**	**3.6E+01**
Benzo(g,h,i)perylene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Benzo(k)fluoranthene	1.0	c		***2.1E+02***	**6.0E+02**	**4.4E+03**	**7.0E+02**	**1.7E+03**	**3.2E+01**	**3.9E+01**	***2.0E+02***	**7.9E+01**	**7.1E+01**	**2.4E+02**	**4.4E+01**	**5.5E+01**	**4.7E+01**
bis(2-Chloroethoxy)methane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
bis(2-Chloroethyl)ether	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
bis(2-Ethylhexyl)phthalate	30	h		**1.8E+01**	8.3E-01	**1.0E+01**	**4.3E+02**	**1.4E+02**	**2.6E+01**	**1.7E+00**	**2.1E+00**	**7.3E+00**	**2.2E+00**	***6.7E+00***	**1.1E+00**	***7.0E+00***	***7.2E+00***
Butyl Benzyl Phthalate	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Carbazole	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Chrysene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dibenzo(a,h)anthracene	1.0	c		***2.1E+02***	***2.1E+02***	***2.0E+03***	**8.6E+01**	**2.8E+02**	***2.1E+02***	***2.3E+02***	***2.0E+02***	***2.2E+02***	***2.1E+02***	***2.0E+02***	***1.9E+02***	***2.1E+02***	***2.2E+02***
Dibenzofuran	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Diethyl Phthalate	100000	a		2.1E-03	2.1E-03	2.0E-02	7.8E-04	2.4E-03	2.1E-03	2.3E-03	2.0E-03	2.2E-03	2.1E-03	2.0E-03	1.9E-03	2.1E-03	2.2E-03
Dimethyl Phthalate	200000	g		1.1E-03	1.0E-03	9.8E-03	1.2E-03	1.2E-03	1.0E-03	1.2E-03	1.0E-03	1.1E-03	1.1E-03	1.0E-03	9.5E-04	1.1E-03	1.1E-03
Di-n-butylphthalate	200000	a	NP	5.5E-04	1.0E-03	9.8E-03	8.0E-04	3.3E-04	1.0E-03	1.2E-03	2.8E-04	1.1E-03	2.6E-04	1.0E-03	9.5E-04	1.1E-03	1.1E-03
Di-n-octylphthalate	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Fluoranthene	100	b		**3.2E+01**	**9.6E+00**	**8.0E+01**	**1.9E+01**	**4.2E+01**	5.7E-01	***2.3E+00***	***2.0E+00***	**1.2E+00**	**1.2E+00**	**3.2E+00**	9.6E-01	6.0E-01	9.5E-01
Fluorene	30000	g		2.1E-03	1.1E-03	6.5E-02	3.2E-03	8.0E-03	6.8E-03	7.7E-03	6.7E-03	7.3E-03	7.0E-03	6.7E-03	6.3E-03	7.0E-03	7.2E-03
Hexachlorobenzene	2.0	c		***1.1E+02***	***1.0E+02***	***9.8E+02***	***1.2E+02***	***1.2E+02***	***1.0E+02***	***1.2E+02***	***1.0E+02***	***1.1E+02***	***1.1E+02***	***1.0E+02***	***9.5E+01***	***1.1E+02***	***1.1E+02***
Hexachlorobutadiene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Hexachlorocyclopentadiene	10000	a		2.1E-02	2.1E-02	2.0E-01	2.4E-02	2.4E-02	2.1E-02	2.3E-02	2.0E-02	2.2E-02	2.1E-02	2.0E-02	1.9E-02	2.1E-02	2.2E-02
Hexachloroethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Indeno(1,2,3-cd)pyrene	1.0	c		***2.1E+02***	***2.1E+02***	***2.0E+03***	**1.8E+02**	**4.4E+02**	***2.1E+02***	***2.3E+02***	***2.0E+02***	**4.9E+01**	***2.1E+02***	**1.2E+02**	**4.5E+01**	***2.1E+02***	***2.2E+02***
Isophorone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Naphthalene	600	e		3.5E-01	3.4E-01	***3.3E+00***	8.2E-01	2.8E-01	3.4E-01	3.8E-01	3.3E-01	3.7E-01	3.5E-01	3.3E-01	3.2E-01	3.5E-01	3.6E-01
Nitrobenzene	40000	g		5.3E-03	5.1E-03	4.9E-02	5.9E-03	6.0E-03	5.1E-03	5.8E-03	5.0E-03	5.5E-03	5.3E-03	5.0E-03	4.8E-03	5.3E-03	5.4E-03
N-Nitroso-di-n-propylamine	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
N-Nitrosodiphenylamine	20000	g		1.1E-02	1.0E-02	9.8E-02	1.2E-02	1.2E-02	1.0E-02	1.2E-02	1.0E-02	1.1E-02	1.1E-02	1.0E-02	9.5E-03	1.1E-02	1.1E-02
Pentachlorophenol	3000	a		4.3E-03	4.2E-03	6.0E-03	7.7E-01	**1.2E+00**	1.2E-02	1.7E-03	1.8E-03	8.0E-04	6.7E-04	3.7E-04	3.3E-03	5.0E-04	6.7E-04
Phenanthrene	5.0	c		**3.2E+02**	**1.9E+02**	**1.3E+03**	**1.6E+02**	**5.6E+02**	**5.2E+00**	***4.6E+01***	***4.0E+01***	**1.3E+01**	**1.2E+01**	**7.6E+00**	**8.8E+00**	***4.2E+01***	**9.0E+00**
Phenol	70000	a		3.0E-03	2.9E-03	2.8E-02	3.4E-03	3.4E-03	2.9E-03	3.3E-03	2.9E-03	3.1E-03	3.0E-03	2.9E-03	2.7E-03	3.0E-03	3.1E-03
Pyrene	10	c		**3.3E+02**	**1.3E+02**	**8.6E+02**	**2.0E+02**	**4.2E+02**	**5.3E+00**	***2.3E+01***	***2.0E+01***	**1.4E+01**	***2.1E+01***	**2.8E+01**	**9.3E+00**	***2.1E+01***	***2.2E+01***
Pesticides (ug/kg)																	
4,4'-DDD	10	d		***2.1E+00***	2.1E-01	3.9E-01	***4.7E+00***	***4.8E+00***	***4.1E+00***	***2.3E+00***	***1.0E+00***	***2.2E+00***	2.1E-01	2.0E-01	1.9E-01	5.7E-01	1.2E-01
4,4'-DDE	10	d		***2.1E+00***	2.1E-01	3.9E-01	**5.7E+01**	**5.6E+01**	R	**4.3E+00**	***1.0E+00***	***2.2E+00***	1.5E-01	2.0E-01	1.9E-01	8.1E-02	7.1E-02
4,4'-DDT	10	c		**2.6E+02**	5.3E-01	**7.8E+00**	**1.5E+02**	**1.4E+02**	**7.9E+01**	**7.1E+00**	**3.9E+00**	**5.3E+01**	5.1E-01	2.1E-01	***1.9E+00***	**4.4E+00**	***2.2E+00***
Aldrin	2.5	b		***4.4E+00***	4.2E-01	8.0E-01	***9.6E+00***	***9.8E+00***	***8.4E+00***	***4.8E+00***	***2.0E+00***	***4.6E+00***	4.4E-01	4.2E-01	4.0E-01	4.4E-01	4.4E-01
alpha-BHC	2.5	b		***4.4E+00***	4.2E-01	8.0E-01	**6.8E+01**	**8.0E+01**	***8.4E+00***	***4.8E+00***	***2.0E+00***	***4.6E+00***	4.4E-01	4.2E-01	4.0E-01	4.4E-01	4.4E-01
alpha-Chlordane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
beta-BHC	1.0	b		**1.1E+01**	***1.1E+00***	***2.0E+00***	***2.4E+01***	***2.5E+01***	***2.1E+01***	***1.2E+01***	***5.0E+00***	***1.2E+01***	***1.1E+00***	***1.1E+00***	***1.0E+00***	***1.1E+00***	***1.1E+00***
delta-BHC	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dieldrin	0.50	b		***4.2E+01***	**5.2E+00**	**3.0E+01**	**8.0E+02**	**7.0E+02**	**5.6E+02**	**2.0E+02**	**4.4E+00**	**3.2E+02**	**6.6E+00**	**1.3E+00**	***3.8E+00***	***4.2E+00***	8.2E-01
Endosulfan I	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Endosulfan II	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Endosulfan Sulfate	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Endrin	1.0	b		**1.7E+02**	**2.4E+00**	***3.9E+00***	***4.7E+01***	***4.8E+01***	***4.1E+01***	***2.3E+01***	***1.0E+01***	***2.2E+01***	***2.1E+00***	***2.0E+00***	***1.9E+00***	***2.1E+00***	***2.2E+00***
Endrin Aldehyde	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Endrin Ketone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
gamma-BHC (Lindane)	0.050	b		***2.2E+02***	***2.1E+01***	***4.0E+01***	***4.8E+02***	***4.9E+02***	***4.2E+02***	***2.4E+02***	***1.0E+02***	***2.3E+02***	***2.2E+01***	***2.1E+01***	***2.0E+01***	***2.2E+01***	***2.2E+01***
gamma-Chlordane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Heptachlor	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Heptachlor Epoxide	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Methoxychlor	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Toxaphene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Herbicides (ug/kg)																	
2,4-D	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4-DB	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4,5-T	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4,5-TP (Silvex)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dalapon	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dicamba	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dichlorprop	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dinoseb	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
MCPA	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
MCPP	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

NOTES:
a = ORNL Vegetative Benchmarks (Efroymson*et al*., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
e = Canadian Environmental Quality Guidelines - Residential/Parkland Standards, 2002
f = NOAA Screening Quick Reference Tables, Urban Park/Residential Target, 1999
g = ORNL Soil Invertebrate Benchmark (Efroymson*et al.*, 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
R = Data point was rejected, therefore the hazard quotient could not be calculated
NR = Analyte not analyzed

Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentration
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	SITE Q SOIL-Q-9 07/26/02 0.5 Ft 19.8	SOIL-Q-10 07/26/02 0.5 Ft 14.9	SOIL-Q-10 DUP 07/26/02 0.5 Ft 12.3	SOIL-Q-11 07/22/02 0.5 Ft 33.6	SOIL-Q-11 DUP 07/22/02 0.5 Ft 30.6	SOIL-Q-12 07/22/02 0.5 Ft 20.8	SOIL-Q-13 10/07/02 0.5 Ft 22.6	SOIL-Q-14 10/07/02 0.5 Ft 18.6	SOIL-Q-15 10/07/02 0.5 Ft 26.1	SOIL-Q-16 10/07/02 0.5 Ft 19.1	SOIL-Q-17 10/07/02 0.5 Ft 15.8	SOIL-Q-18 10/07/02 0.5 Ft 14.9	SOIL-Q-19 10/07/02 0.5 Ft 20.7	SOIL-Q-20 10/07/02 0.5 Ft 22.2
PCBs (ug/kg)	**Benchmark**																
Total PCBs	40000	a	NP	2.7E-01	2.7E-02	3.9E-02	3.2E-01	3.5E-01	7.2E-02	2.8E-02	6.5E-02	8.1E-03	3.7E-04	2.6E-04	2.5E-04	3.3E-05	2.8E-04
Dioxins/Furans (ug/kg)																	
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.0010	c	0.010	**7.0E+01**	**1.7E+02**	**1.6E+02**	**4.0E+03**	**1.2E+03**	**3.2E+01**	**2.6E+01**	**2.1E+01**	**9.4E+00**	***1.3E+00***	***1.0E+00***	***1.0E+00***	***3.1E+00***	***1.2E+00***
1,2,3,4,6,7,8-HpCDF	0.0010	c	0.010	**1.8E+01**	**2.4E+01**	**1.6E+01**	**6.1E+02**	**2.1E+02**	***3.8E+00***	***2.2E+00***	***2.5E+00***	***1.4E+00***	***1.4E+00***	***1.5E+00***	***1.7E+00***	***2.0E+00***	***2.0E+00***
1,2,3,4,7,8,9-HpCDF	0.0010	c	0.010	***3.6E+00***	***2.4E+00***	***1.4E+00***	**6.1E+01**	**1.3E+02**	7.5E-01	5.5E-01	9.0E-01	7.5E-01	8.5E-01	7.5E-01	9.0E-01	***1.1E+00***	***1.6E+00***
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	***2.0E+01***	***1.6E+01***	***2.3E+01***	***3.2E+01***	***1.1E+01***	***4.4E+00***	***2.8E+00***	***3.1E+00***	***2.2E+00***	***1.3E+00***	***1.2E+00***	9.0E-01	***1.5E+00***	6.5E-01
1,2,3,4,7,8-HxCDF	0.0010	c	0.10	**9.3E+01**	**9.7E+01**	***1.9E+01***	**5.0E+02**	**1.5E+03**	***1.0E+01***	***7.5E+00***	***1.8E+00***	***8.5E+00***	***6.0E+00***	***2.2E+00***	***2.5E+00***	***6.0E+00***	***3.9E+00***
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	***3.2E+01***	***3.5E+01***	***2.4E+01***	**1.2E+03**	**2.7E+02**	***1.0E+01***	***2.8E+00***	***5.0E+00***	***5.5E+00***	***3.8E+00***	***3.5E+00***	***4.4E+00***	***5.0E+00***	***5.5E+00***
1,2,3,6,7,8-HxCDF	0.0010	c	0.10	***3.3E+01***	***1.9E+01***	***3.7E+00***	**1.3E+02**	**4.0E+02**	***1.1E+01***	***2.9E+00***	***4.1E+00***	***4.3E+00***	***2.7E+00***	***2.0E+00***	***2.3E+00***	***3.0E+00***	***2.7E+00***
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	***3.4E+01***	***2.2E+01***	***2.1E+01***	***2.0E+01***	***1.0E+01***	***3.2E+00***	***7.0E+00***	***4.6E+00***	***3.5E+00***	***3.1E+00***	***2.3E+00***	***4.1E+00***	***5.5E+00***	***2.9E+00***
1,2,3,7,8,9-HxCDF	0.0010	c	0.10	***3.6E+01***	***1.8E+01***	***7.5E+00***	***2.6E+01***	**1.7E+02**	***5.5E+00***	***3.5E+00***	***2.8E+00***	***3.1E+00***	***2.9E+00***	***2.9E+00***	***3.5E+00***	***5.5E+00***	***4.5E+00***
1,2,3,7,8-Pentachlorodibenzofuran	0.0010	c	0.050	***1.1E+01***	***7.0E+00***	***2.4E+00***	***1.1E+01***	**4.7E+01**	***1.6E+00***	***1.9E+00***	***1.2E+00***	***1.5E+00***	***1.0E+00***	***1.1E+00***	***1.6E+00***	***1.9E+00***	***1.6E+00***
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.0010	c	1.0	***2.0E+02***	***1.3E+02***	***4.8E+01***	***1.6E+02***	***2.1E+02***	***6.0E+01***	***1.8E+02***	***1.0E+02***	***1.8E+02***	***7.0E+01***	***8.0E+01***	***2.3E+02***	***1.5E+02***	***1.9E+02***
2,3,4,6,7,8-HxCDF	0.0010	c	0.10	***3.6E+01***	***2.2E+01***	***7.5E+00***	***4.2E+01***	**2.5E+02**	***4.1E+00***	***4.3E+00***	***2.5E+00***	***3.0E+00***	***2.9E+00***	***2.3E+00***	***2.5E+00***	***2.9E+00***	***3.5E+00***
2,3,4,7,8-PeCDF	0.0010	c	0.50	***1.4E+02***	***9.8E+01***	***3.8E+01***	**6.5E+02**	**1.7E+03**	***1.3E+01***	***4.3E+01***	***2.8E+01***	***2.4E+01***	***2.2E+01***	***2.1E+01***	***2.2E+01***	***2.3E+01***	***2.5E+01***
2,3,7,8-TCDD	0.0010	c	1.0	***7.0E+01***	***4.4E+01***	***2.8E+01***	***1.2E+02***	***6.5E+01***	***1.5E+01***	***1.9E+01***	***1.7E+01***	***1.3E+01***	***1.3E+01***	***1.4E+01***	***1.8E+01***	***1.6E+01***	***1.2E+01***
2,3,7,8-Tetrachlorodibenzofuran	0.0010	c	0.10	***1.5E+01***	***1.3E+01***	***3.7E+00***	***6.5E+00***	***1.4E+01***	***1.0E+01***	***9.0E+00***	***4.3E+00***	***4.0E+00***	***1.1E+00***	***1.1E+00***	***1.5E+00***	***1.7E+00***	***1.3E+00***
OCDD	0.0010	c	0.00010	**8.7E+00**	**2.4E+01**	**2.5E+01**	**3.6E+02**	**1.2E+02**	**2.6E+00**	**3.7E+00**	**2.6E+00**	**1.5E+00**	5.1E-01	5.2E-01	**7.5E+00**	**2.9E+00**	6.9E-01
OCDF	0.0010	c	0.00010	6.6E-01	7.8E-01	7.4E-01	**4.2E+01**	**1.2E+01**	3.1E-01	1.8E-01	1.9E-01	2.2E-02	1.3E-02	1.6E-02	1.5E-02	3.1E-02	2.5E-02
Total HpCDD	0.0010	c	0.010	**1.3E+02**	**3.4E+02**	**3.2E+02**	**6.3E+03**	**1.8E+03**	**5.3E+01**	**4.8E+01**	**3.7E+01**	**1.8E+01**	***1.3E+00***	***1.5E+00***	***1.0E+00***	***3.1E+00***	***1.5E+00***
Total HpCDF	0.0010	c	0.010	**5.0E+01**	**7.3E+01**	**6.3E+01**	**3.6E+03**	**1.1E+03**	**2.0E+01**	**1.3E+01**	**1.3E+01**	***1.6E+00***	***1.4E+00***	***1.5E+00***	***1.7E+00***	***2.0E+00***	***2.0E+00***
Total HxCDD	0.0010	c	0.10	**1.9E+02**	**9.7E+01**	**9.0E+01**	**3.4E+03**	**1.1E+03**	***1.2E+01***	***1.1E+01***	***2.5E+01***	***5.5E+00***	***3.8E+00***	***3.5E+00***	***4.4E+00***	***5.5E+00***	***5.5E+00***
Total HxCDF	0.0010	c	0.10	**1.8E+02**	**2.8E+02**	**1.0E+02**	**5.9E+03**	**4.7E+03**	***2.6E+01***	**7.9E+01**	***1.1E+01***	***9.5E+00***	***6.5E+00***	***3.4E+00***	***4.4E+00***	***7.0E+00***	***5.5E+00***
Total PeCDD	0.0010	c	1.0	***2.0E+02***	***2.1E+02***	***6.5E+01***	***8.0E+02***	***2.7E+02***	***1.7E+02***	***2.0E+02***	***1.5E+02***	***2.1E+02***	***1.8E+02***	***1.4E+02***	***2.4E+02***	***1.5E+02***	***1.9E+02***
Total PeCDF	0.0010	c	0.50	***1.6E+02***	***1.3E+02***	***6.5E+01***	**1.8E+03**	**6.5E+03**	***5.8E+01***	***6.8E+01***	***3.5E+01***	***3.0E+01***	***2.5E+01***	***2.5E+01***	***4.0E+01***	***3.3E+01***	***3.0E+01***
Total TCDD	0.0010	c	1.0	***1.1E+02***	**5.3E+02**	**4.8E+02**	***1.7E+02***	***1.1E+02***	***2.7E+01***	***1.9E+01***	***1.7E+01***	***1.3E+01***	***1.3E+01***	***1.4E+01***	***1.8E+01***	***1.6E+01***	***1.2E+01***
Total TCDF	0.0010	c	0.10	**1.5E+02**	**1.9E+02**	**2.9E+01**	**1.6E+02**	**3.6E+02**	***1.0E+01***	***9.0E+00***	***4.5E+00***	***4.1E+00***	***3.4E+00***	***3.5E+00***	***3.0E+00***	***3.1E+00***	***5.5E+00***
Metals (mg/kg)																	
Aluminum	50	a		**2.2E+02**	**2.0E+02**	**2.2E+02**	**2.2E+02**	**2.0E+02**	**2.4E+02**	**2.8E+02**	**1.4E+02**	**2.2E+02**	**1.5E+02**	**8.0E+01**	**7.6E+01**	**1.5E+02**	**1.8E+02**
Antimony	5.0	a		**9.4E+00**	6.0E-01	5.0E-01	**5.2E+00**	**4.0E+00**	2.2E-01	2.6E-01	2.2E-01	2.7E-01	2.5E-01	2.2E-01	2.1E-01	2.3E-01	2.6E-01
Arsenic	10	a		**3.3E+00**	**2.0E+00**	**1.4E+00**	**1.8E+00**	**1.7E+00**	6.0E-01	7.9E-01	5.1E-01	5.0E-01	5.5E-01	4.2E-01	3.3E-01	4.3E-01	7.1E-01
Barium	500	a		**2.0E+00**	**1.4E+00**	**1.5E+00**	**2.6E+00**	**3.0E+00**	4.0E-01	5.0E-01	3.6E-01	3.6E-01	3.0E-01	2.0E-01	1.7E-01	3.2E-01	3.4E-01
Beryllium	10	a		5.4E-02	7.1E-02	7.9E-02	6.4E-02	6.2E-02	8.2E-02	9.9E-02	5.3E-02	9.7E-02	5.4E-02	3.1E-02	2.8E-02	5.4E-02	7.1E-02
Cadmium	4	a		**5.5E+00**	**3.3E+00**	**2.8E+00**	**7.5E+00**	**7.3E+00**	3.5E-01	6.0E-01	4.5E-01	4.8E-01	2.5E-01	2.3E-01	1.0E-01	2.5E-01	4.0E-01
Calcium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Chromium	1.0	a		**6.6E+02**	**5.1E+01**	**4.8E+01**	**1.7E+02**	**1.5E+02**	**2.0E+01**	**2.4E+01**	**1.7E+01**	**2.0E+01**	**1.3E+01**	**8.2E+00**	**8.0E+00**	**1.3E+01**	**1.6E+01**
Cobalt	20	a		**1.0E+00**	6.0E-01	5.5E-01	8.0E-01	8.0E-01	4.4E-01	5.5E-01	3.4E-01	4.3E-01	3.4E-01	2.6E-01	2.5E-01	3.4E-01	4.2E-01
Copper	100	a		**7.1E+00**	**3.0E+00**	**4.1E+00**	**2.6E+01**	**8.7E+00**	3.3E-01	4.2E-01	8.6E-01	3.5E-01	2.1E-01	1.0E-01	7.0E-02	2.0E-01	2.1E-01
Iron	200	b	NP	**4.5E+02**	**3.6E+02**	**2.0E+02**	**3.0E+02**	**3.2E+02**	**9.5E+01**	**1.2E+02**	**7.0E+01**	**9.5E+01**	**7.5E+01**	**4.8E+01**	**4.6E+01**	**7.0E+01**	**8.5E+01**
Lead	50	a		**6.2E+01**	**7.8E+00**	**9.8E+00**	**5.2E+01**	**4.0E+01**	9.4E-01	**1.2E+00**	**1.2E+00**	9.6E-01	5.4E-01	4.0E-01	3.0E-01	6.0E-01	5.8E-01
Magnesium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Manganese	500	a		**4.2E+00**	**1.3E+00**	**1.0E+00**	**1.6E+00**	**1.4E+00**	9.2E-01	**1.3E+00**	7.6E-01	6.4E-01	7.6E-01	6.4E-01	5.8E-01	7.4E-01	**1.3E+00**
Mercury	0.30	a		**3.3E+00**	**8.3E+00**	**9.0E+00**	**7.7E+00**	**1.4E+01**	2.0E-01	4.7E-01	4.3E-01	5.3E-01	2.6E-01	1.2E-01	7.0E-02	1.7E-01	2.2E-01
Nickel	30	a		**1.7E+01**	**2.0E+00**	**1.6E+00**	**2.6E+00**	**2.6E+00**	7.3E-01	9.0E-01	9.7E-01	7.3E-01	5.7E-01	4.0E-01	3.7E-01	5.3E-01	6.3E-01
Potassium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Selenium	1.0	a		***1.3E+00***	5.5E-01	5.0E-01	**3.0E+00**	**2.5E+00**	5.5E-01	6.5E-01	5.5E-01	7.0E-01	6.5E-01	5.5E-01	5.0E-01	6.0E-01	6.5E-01
Silver	2.0	a		**6.0E+00**	**1.0E+00**	**1.3E+00**	**8.5E+00**	**4.2E+00**	2.8E-01	9.0E-02	5.5E-02	3.5E-01	3.3E-01	2.8E-01	2.5E-01	3.0E-01	3.3E-01
Sodium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Thallium	1.0	a		***1.2E+00***	5.5E-01	6.0E-01	7.0E-01	**3.3E+00**	5.5E-01	**1.9E+00**	5.5E-01	9.7E-01	**1.1E+00**	5.5E-01	5.0E-01	7.9E-01	6.5E-01
Vanadium	2.0	a		**1.4E+01**	**1.5E+01**	**1.6E+01**	**1.3E+01**	**1.4E+01**	**1.5E+01**	**1.8E+01**	**1.1E+01**	**1.6E+01**	**1.1E+01**	**7.0E+00**	**6.5E+00**	**1.1E+01**	**1.3E+01**
Zinc	50	a		**6.0E+01**	**2.4E+01**	**2.4E+01**	**6.8E+01**	**7.2E+01**	**4.2E+00**	**5.2E+00**	**4.8E+00**	**5.2E+00**	**2.8E+00**	**2.8E+00**	**2.0E+00**	**3.2E+00**	**5.4E+00**

NOTES:
a = ORNL Vegetative Benchmarks (Efromyson*et al*., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
e = Canadian Environmental Quality Guidelines - Residential/Parkland Standards, 2002
f = NOAA Screening Quick Reference Tables, Urban Park/Residential Target, 1999
g = ORNL Soil Invertebrate Benchmark (Efromyson*et al.*, 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
R = Data point was rejected, therefore the hazard quotient could not be calculated
NR = Analyte not analyzed

Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentration
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	SITE Q AT-Q-33-SS 5/26/05 0.5 Ft NR	AT-Q-34-SS 5/26/05 0.5 Ft NR	AT-Q-35-SS 5/26/05 0.5 Ft NR	AT-Q-36-SS 5/26/05 0.5 Ft NR	SA-Q-9-SS 5/26/05 0.5 Ft NR	SA-Q-10-SS 5/26/05 0.5 Ft NR	SA-Q-10-SS-D 5/26/05 0.5 Ft NR	SA-Q-11-SS 5/26/05 0.5 Ft NR	SA-Q-12-SS 5/26/05 0.5 Ft NR	SA-Q-14-SS 5/26/05 0.5 Ft NR	SA-Q-15-SS 5/26/05 0.5 Ft NR	SA-Q-16-SS 5/26/05 0.5 Ft NR
VOCs (ug/kg)	**Benchmark**														
1,1,1-Trichloroethane	100	b,i		2.4E-02	2.2E-02	3.1E-02	2.3E-02	2.6E-02	2.5E-02	2.4E-02	2.7E-02	2.8E-02	2.2E-02	2.0E-02	2.3E-02
1,1,2,2-Tetrachloroethane	5000	f		4.7E-04	4.4E-04	6.1E-04	4.5E-04	5.1E-04	5.0E-04	4.7E-04	5.3E-04	5.5E-04	4.4E-04	4.0E-04	4.6E-04
1,1,2-Trichloroethane	100	b,i		2.4E-02	2.2E-02	3.1E-02	2.3E-02	2.6E-02	2.5E-02	2.4E-02	2.7E-02	2.8E-02	2.2E-02	2.0E-02	2.3E-02
1,1-Dichloroethane	100	b,i		2.4E-02	2.2E-02	3.1E-02	2.3E-02	2.6E-02	2.5E-02	2.4E-02	2.7E-02	2.8E-02	2.2E-02	2.0E-02	2.3E-02
1,1-Dichloroethylene	100	b,i		2.4E-02	2.2E-02	3.1E-02	2.3E-02	2.6E-02	2.5E-02	2.4E-02	2.7E-02	2.8E-02	2.2E-02	2.0E-02	2.3E-02
1,2-Dichloroethane	100	b,i		2.4E-02	2.2E-02	3.1E-02	2.3E-02	2.6E-02	2.5E-02	2.4E-02	2.7E-02	2.8E-02	2.2E-02	2.0E-02	2.3E-02
1,2-Dichloroethene (total)	100	b,i		1.6E-01	4.4E-02	6.0E-02	4.6E-02	5.0E-02	5.0E-02	6.9E-02	5.5E-02	5.5E-02	4.4E-02	4.0E-02	4.6E-02
1,2-Dichloropropane	700000	g		3.4E-06	3.1E-06	4.4E-06	3.2E-06	3.6E-06	3.6E-06	3.4E-06	3.8E-06	3.9E-06	3.1E-06	2.9E-06	3.3E-06
2-Butanone (MEK)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Hexanone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Methyl-2-pentanone (MIBK)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Acetone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Benzene	50	b		6.6E-02	4.4E-02	3.8E-02	3.2E-02	5.1E-02	2.0E-01	3.6E-01	1.5E-01	4.6E-02	1.1E-01	4.0E-02	2.2E-02
Bromodichloromethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Bromoform	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Bromomethane	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Carbon Disulfide	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Carbon Tetrachloride	1000000	b		2.4E-06	2.2E-06	3.1E-06	2.3E-06	2.6E-06	2.5E-06	2.4E-06	2.7E-06	2.8E-06	2.2E-06	2.0E-06	2.3E-06
Chlorobenzene	40000	g		3.3E-05	5.0E-05	7.6E-05	5.6E-05	6.4E-05	6.3E-05	5.9E-05	8.0E-05	6.9E-05	2.5E-04	5.0E-05	5.8E-05
Chloroethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Chloroform	5.0	c,i		4.7E-01	4.4E-01	6.1E-01	4.5E-01	5.1E-01	5.0E-01	4.7E-01	5.3E-01	5.5E-01	4.4E-01	4.0E-01	4.6E-01
Chloromethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
cis-1,3-Dichloropropene	5.0	c,i		4.7E-01	4.4E-01	6.1E-01	4.5E-01	5.1E-01	5.0E-01	4.7E-01	5.3E-01	5.5E-01	4.4E-01	4.0E-01	4.6E-01
Dibromochloromethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Ethylbenzene	50	b		2.4E-02	4.4E-02	3.0E-02	4.5E-02	5.1E-02	2.2E-02	6.4E-02	4.2E-02	5.5E-02	2.6E-02	4.0E-02	4.6E-02
Methylene Chloride	5000	e		4.7E-04	4.4E-04	6.1E-04	4.5E-04	5.1E-04	5.0E-04	4.7E-04	5.8E-04	5.5E-04	4.4E-04	4.0E-04	4.6E-04
Styrene (Monomer)	300000	a		7.8E-06	7.3E-06	1.0E-05	7.5E-06	8.5E-06	8.3E-06	7.8E-06	8.8E-06	9.2E-06	7.3E-06	6.7E-06	7.7E-06
Tetrachloroethene	10	b		**1.7E+02**	2.2E-01	5.5E-01	2.1E-01	2.6E-01	**1.4E+01**	**5.5E+01**	**4.1E+00**	2.8E-01	3.2E-01	2.0E-01	2.3E-01
Toluene	200000	a		2.4E-05	1.3E-05	3.3E-05	4.3E-05	1.2E-05	3.7E-04	2.0E-03	1.6E-04	4.2E-05	8.0E-05	1.0E-05	1.5E-05
trans-1,3-Dichloropropene	5.0	c,i		4.7E-01	4.4E-01	6.1E-01	4.5E-01	5.1E-01	5.0E-01	4.7E-01	5.3E-01	5.5E-01	4.4E-01	4.0E-01	4.6E-01
Trichloroethylene	5.0	c		**6.2E+00**	4.4E-01	6.6E-01	**1.3E+00**	5.1E-01	**5.6E+00**	**1.7E+01**	**1.2E+00**	5.5E-01	**1.1E+00**	4.0E-01	4.6E-01
Vinyl chloride	10	b		2.4E-01	2.2E-01	3.1E-01	2.3E-01	2.6E-01	2.5E-01	2.4E-01	2.7E-01	2.8E-01	2.2E-01	2.0E-01	2.3E-01
Xylenes, Total	50	b		8.2E-02	8.8E-02	1.2E-01	8.2E-02	1.0E-01	2.6E-01	5.6E-01	**1.3E+00**	8.4E-02	1.8E-01	8.0E-02	9.2E-02
SVOCs (ug/kg)															
1,2,4-Trichlorobenzene	20000	g		9.5E-03	9.5E-03	1.2E-02	1.0E-02	9.5E-03	1.0E-02	9.8E-03	1.0E-02	1.0E-02	9.8E-03	9.8E-03	9.5E-03
1,2-Dichlorobenzene	1.0	c		***1.9E+02***	***1.9E+02***	***2.4E+02***	***2.1E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.1E+02***	***2.0E+02***	***2.0E+02***	***1.9E+02***
1,3-Dichlorobenzene	1.0	c		***1.9E+02***	***1.9E+02***	***2.4E+02***	***2.1E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.1E+02***	***2.0E+02***	***2.0E+02***	***1.9E+02***
1,4-Dichlorobenzene	20000	g		9.5E-03	9.5E-03	1.2E-02	1.0E-02	9.5E-03	1.0E-02	9.8E-03	1.0E-02	1.0E-02	4.1E-03	9.8E-03	9.5E-03
2,2'-Oxybis(1-Chloropropane)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4,5-Trichlorophenol	4000	a		4.8E-02	4.8E-02	NR	5.1E-02	4.8E-02	5.0E-02	4.9E-02	5.0E-02	NR	4.9E-02	4.9E-02	4.8E-02
2,4,6-Trichlorophenol	10000	g		1.9E-02	1.9E-02	2.4E-02	2.1E-02	1.9E-02	2.0E-02	2.0E-02	2.0E-02	2.1E-02	2.0E-02	2.0E-02	1.9E-02
2,4-Dichlorophenol	0.50	c		***3.8E+02***	***3.8E+02***	***4.8E+02***	***4.1E+02***	***3.8E+02***	***4.0E+02***	***3.9E+02***	***4.0E+02***	***4.1E+02***	***3.9E+02***	***3.9E+02***	***3.8E+02***
2,4-Dimethylphenol	1.0	c		***1.9E+02***	***1.9E+02***	***2.4E+02***	***2.1E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.1E+02***	***2.0E+02***	***2.0E+02***	***1.9E+02***
2,4-Dinitrophenol	20000	a		5.0E-02	5.0E-02	6.3E-02	5.3E-02	4.8E-02	5.3E-02	5.0E-02	5.3E-02	5.3E-02	5.0E-02	5.0E-02	4.8E-02
2,4-Dinitrotoluene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,6-Dinitrotoluene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Chloronaphthalene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Chlorophenol	0.50	c		***3.8E+02***	***3.8E+02***	***4.8E+02***	***4.1E+02***	***3.8E+02***	***4.0E+02***	***3.9E+02***	***4.0E+02***	***4.1E+02***	***3.9E+02***	***3.9E+02***	***3.8E+02***
2-Methylnaphthalene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Methylphenol (o-Cresol)	1.0	c	NP	***1.9E+02***	***1.9E+02***	***2.4E+02***	***2.1E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.1E+02***	***2.0E+02***	***2.0E+02***	***1.9E+02***
2-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2-Nitrophenol	1.0	c		***1.9E+02***	***1.9E+02***	***2.4E+02***	***2.1E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.1E+02***	***2.0E+02***	***2.0E+02***	***1.9E+02***
3,3'-Dichlorobenzidine	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
3/4-Methylphenol (m&p-Cresol)	1.0	c		***1.9E+02***	***1.9E+02***	***2.4E+02***	***2.1E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.1E+02***	***2.0E+02***	***2.0E+02***	***1.9E+02***
3-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4,6-Dinitro-2-methylphenol	1.0	c		***1.0E+03***	***1.0E+03***	***1.3E+03***	***1.1E+03***	***9.5E+02***	***1.1E+03***	***1.0E+03***	***1.1E+03***	***1.1E+03***	***1.0E+03***	***1.0E+03***	***9.5E+02***
4-Bromophenyl Phenyl Ether	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Chloro-3-methylphenol	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Chloroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Chlorophenyl Phenyl Ether	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
4-Nitrophenol	7000	g		1.4E-01	1.4E-01	1.8E-01	1.5E-01	1.4E-01	1.5E-01	1.4E-01	1.5E-01	1.5E-01	1.4E-01	1.4E-01	1.4E-01
Acenaphthene	20000	a		9.5E-03	9.5E-03	1.5E-02	1.0E-02	9.5E-03	1.0E-02	9.8E-03	2.7E-03	1.0E-02	9.8E-03	9.8E-03	9.5E-03
Acenaphthylene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Anthracene	100	b		***1.9E+00***	3.8E-01	**9.2E+00**	4.1E-01	***1.9E+00***	***2.0E+00***	***2.0E+00***	**3.7E+00**	***2.1E+00***	***2.0E+00***	***2.0E+00***	***1.9E+00***

NOTES:
a = ORNL Vegetative Benchmarks (Efromyson *et al* ., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
e = Canadian Environmental Quality Guidelines - Residential/Parkland Standards, 2002
f = NOAA Screening Quick Reference Tables, Urban Park/Residential Target, 1999
g = ORNL Soil Invertebrate Benchmark (Efromyson *et al.* , 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
R = Data point was rejected, therefore the hazard quotient could not be calculated
NR = Analyte not analyzed

Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	SITE Q AT-Q-33-SS 5/26/05 0.5 Ft NR	AT-Q-34-SS 5/26/05 0.5 Ft NR	AT-Q-35-SS 5/26/05 0.5 Ft NR	AT-Q-36-SS 5/26/05 0.5 Ft NR	SA-Q-9-SS 5/26/05 0.5 Ft NR	SA-Q-10-SS 5/26/05 0.5 Ft NR	SA-Q-10-SS-D 5/26/05 0.5 Ft NR	SA-Q-11-SS 5/26/05 0.5 Ft NR	SA-Q-12-SS 5/26/05 0.5 Ft NR	SA-Q-14-SS 5/26/05 0.5 Ft NR	SA-Q-15-SS 5/26/05 0.5 Ft NR	SA-Q-16-SS 5/26/05 0.5 Ft NR
SVOCs (ug/kg)	**Benchmark**														
Benzo(a)anthracene	1.0	c		***1.9E+02***	**1.6E+02**	**2.2E+03**	**1.2E+02**	**6.9E+01**	**4.3E+01**	**5.2E+01**	**1.5E+03**	**6.1E+01**	**6.6E+01**	**6.3E+01**	***1.9E+02***
Benzo(a)pyrene	100	b		***1.9E+00***	**1.4E+00**	**2.0E+01**	**1.1E+00**	7.2E-01	4.3E-01	5.2E-01	**1.1E+01**	6.5E-01	7.9E-01	**1.2E+00**	2.3E-01
Benzo(b)fluoranthene	1.0	c		***1.9E+02***	**1.7E+02**	**1.8E+03**	**1.0E+02**	**6.6E+01**	**3.9E+01**	**3.9E+01**	**9.9E+02**	**6.0E+01**	**9.7E+01**	**1.2E+02**	***1.9E+02***
Benzo(g,h,i)perylene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Benzo(k)fluoranthene	1.0	c		***1.9E+02***	**1.3E+02**	**1.6E+03**	**1.1E+02**	**7.9E+01**	**4.9E+01**	**5.7E+01**	**1.1E+03**	**6.8E+01**	**7.5E+01**	**1.2E+02**	***1.9E+02***
bis(2-Chloroethoxy)methane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
bis(2-Chloroethyl)ether	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
bis(2-Ethylhexyl)phthalate	30	h		**1.1E+01**	***4.0E+00***	**3.1E+00**	**1.2E+01**	***6.3E+00***	**1.6E+02**	**6.0E+01**	**3.7E+01**	**4.0E+00**	**5.0E+01**	***6.5E+00***	***6.3E+00***
Butyl Benzyl Phthalate	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Carbazole	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Chrysene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dibenzo(a,h)anthracene	1.0	c		***1.9E+02***	***1.9E+02***	**4.4E+02**	***2.1E+02***	***1.9E+02***	***2.0E+02***	***2.0E+02***	***2.0E+02***	***2.1E+02***	**6.1E+01**	**7.4E+01**	***1.9E+02***
Dibenzofuran	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Diethyl Phthalate	100000	a		1.9E-03	1.9E-03	2.4E-03	2.1E-03	1.9E-03	2.0E-03	2.0E-03	2.0E-03	2.1E-03	2.0E-03	2.0E-03	1.9E-03
Dimethyl Phthalate	200000	g		9.5E-04	9.5E-04	1.2E-03	1.0E-03	9.5E-04	1.0E-03	9.8E-04	1.0E-03	1.0E-03	9.8E-04	9.8E-04	9.5E-04
Di-n-butylphthalate	200000	a	NP	9.5E-04	9.5E-04	1.2E-03	1.0E-03	9.5E-04	1.0E-03	9.8E-04	5.0E-04	1.0E-03	3.0E-04	9.8E-04	9.5E-04
Di-n-octylphthalate	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Fluoranthene	100	b		4.3E-01	**3.5E+00**	**4.8E+01**	**2.6E+00**	**1.0E+00**	8.4E-01	**1.1E+00**	**3.4E+01**	9.5E-01	**1.4E+00**	8.1E-01	3.4E-01
Fluorene	30000	g		6.3E-03	6.3E-03	1.1E-02	6.8E-03	6.3E-03	6.7E-03	6.5E-03	1.7E-03	6.8E-03	6.5E-03	6.5E-03	6.3E-03
Hexachlorobenzene	2.0	c		***9.5E+01***	***9.5E+01***	***1.2E+02***	***1.0E+02***	***9.5E+01***	***1.0E+02***	***9.8E+01***	***1.0E+02***	***1.0E+02***	**2.8E+01**	***9.8E+01***	***9.5E+01***
Hexachlorobutadiene	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Hexachlorocyclopentadiene	10000	a		1.9E-02	1.9E-02	2.4E-02	2.1E-02	1.9E-02	2.0E-02	2.0E-02	2.0E-02	2.1E-02	2.0E-02	2.0E-02	1.9E-02
Hexachloroethane	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Indeno(1,2,3-cd)pyrene	1.0	c		***1.9E+02***	**1.1E+02**	**1.2E+03**	**7.0E+01**	**5.0E+01**	***2.0E+02***	**3.7E+01**	**6.4E+02**	**5.0E+01**	**1.1E+02**	**9.9E+01**	***1.9E+02***
Isophorone	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Naphthalene	600	e		3.2E-01	4.7E-02	3.2E-01	3.4E-01	3.2E-01	3.3E-01	3.3E-01	3.3E-01	3.4E-01	1.6E-01	3.3E-01	3.2E-01
Nitrobenzene	40000	g		4.8E-03	4.8E-03	6.0E-03	5.1E-03	4.8E-03	5.0E-03	4.9E-03	5.0E-03	5.1E-03	4.9E-03	4.9E-03	4.8E-03
N-Nitroso-di-n-propylamine	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
N-Nitrosodiphenylamine	20000	g		9.5E-03	9.5E-03	1.2E-02	1.0E-02	9.5E-03	1.0E-02	9.8E-03	1.0E-02	1.0E-02	9.8E-03	9.8E-03	9.5E-03
Pentachlorophenol	3000	a		3.2E-03	2.8E-03	5.0E-03	6.3E-03	1.6E-03	7.0E-03	2.2E-03	1.5E-02	9.7E-03	1.5E-02	6.0E-03	1.6E-03
Phenanthrene	5.0	c		***3.8E+01***	**4.2E+01**	**7.6E+02**	**3.8E+01**	**7.8E+00**	***4.0E+01***	**9.2E+00**	**2.8E+02**	**1.0E+01**	**1.2E+01**	***3.9E+01***	***3.8E+01***
Phenol	70000	a		2.7E-03	2.7E-03	3.4E-03	2.9E-03	2.7E-03	2.9E-03	2.8E-03	2.9E-03	2.9E-03	2.8E-03	2.8E-03	2.7E-03
Pyrene	10	c		**4.0E+00**	**3.1E+01**	**3.9E+02**	**2.2E+01**	**9.4E+00**	**6.9E+00**	**8.8E+00**	**3.3E+02**	**1.1E+01**	**1.3E+01**	**8.1E+00**	**3.4E+00**
Pesticides (ug/kg)															
4,4'-DDD	10	d		**1.8E+00**	NR	NR	7.4E-01	1.9E-01	2.0E-01	3.9E-01	***2.0E+00***	8.0E-01	***2.0E+00***	9.5E-01	1.2E-01
4,4'-DDE	10	d		**6.5E+00**	NR	NR	**5.7E+00**	1.9E-01	1.5E-01	9.4E-02	***2.0E+00***	8.0E-01	***2.0E+00***	9.5E-01	2.6E-01
4,4'-DDT	10	c		**2.8E+01**	NR	NR	**6.8E+00**	1.9E-01	**4.6E+00**	**2.6E+00**	**5.0E+01**	**1.9E+00**	**7.8E+01**	**1.9E+01**	4.8E-01
Aldrin	2.5	b		4.0E-01	NR	NR	***1.7E+00***	3.8E-01	**1.7E+00**	2.8E-01	***4.2E+00***	***1.7E+00***	***4.0E+00***	***2.0E+00***	3.8E-01
alpha-BHC	2.5	b		4.0E-01	NR	NR	***1.7E+00***	3.8E-01	4.2E-01	8.0E-01	***4.2E+00***	***1.7E+00***	***4.0E+00***	***2.0E+00***	3.8E-01
alpha-Chlordane	NC	NA		NC	NR	NR	NC	NC	NC	NC	NC	NC	NC	NC	NC
beta-BHC	1.0	b		***1.0E+00***	NR	NR	***4.2E+00***	9.5E-01	***1.1E+00***	***2.0E+00***	***1.1E+01***	***4.2E+00***	***1.0E+01***	***5.0E+00***	9.5E-01
delta-BHC	NC	NA		NC	NR	NR	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dieldrin	0.50	b		**3.0E+01**	NR	NR	***1.6E+01***	***3.8E+00***	**6.0E+01**	**2.8E+01**	***4.0E+01***	**3.6E+01**	***3.9E+01***	***1.9E+01***	**9.8E+00**
Endosulfan I	NC	NA	NP	NC	NR	NR	NC	NC	NC	NC	NC	NC	NC	NC	NC
Endosulfan II	NC	NA		NC	NR	NR	NC	NC	NC	NC	NC	NC	NC	NC	NC
Endosulfan Sulfate	NC	NA		NC	NR	NR	NC	NC	NC	NC	NC	NC	NC	NC	NC
Endrin	1.0	b		***1.9E+00***	NR	NR	***8.0E+00***	***1.9E+00***	***2.0E+00***	***3.9E+00***	***2.0E+01***	***8.0E+00***	***2.0E+01***	***9.5E+00***	***1.9E+00***
Endrin Aldehyde	NC	NA		NC	NR	NR	NC	NC	NC	NC	NC	NC	NC	NC	NC
Endrin Ketone	NC	NA		NC	NR	NR	NC	NC	NC	NC	NC	NC	NC	NC	NC
gamma-BHC (Lindane)	0.050	b		***2.0E+01***	NR	NR	***8.4E+01***	***1.9E+01***	***2.1E+01***	***4.0E+01***	***2.1E+02***	***8.4E+01***	**1.5E+02**	***1.0E+02***	***1.9E+01***
gamma-Chlordane	NC	NA		NC	NR	NR	NC	NC	NC	NC	NC	NC	NC	NC	NC
Heptachlor	NC	NA		NC	NR	NR	NC	NC	NC	NC	NC	NC	NC	NC	NC
Heptachlor Epoxide	NC	NA		NC	NR	NR	NC	NC	NC	NC	NC	NC	NC	NC	NC
Methoxychlor	NC	NA		NC	NR	NR	NC	NC	NC	NC	NC	NC	NC	NC	NC
Toxaphene	NC	NA		NC	NR	NR	NC	NC	NC	NC	NC	NC	NC	NC	NC
Herbicides (ug/kg)															
2,4-D	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4-DB	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4,5-T	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2,4,5-TP (Silvex)	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dalapon	NC	NA	NP	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dicamba	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dichlorprop	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dinoseb	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
MCPA	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
MCPP	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

NOTES:
a = ORNL Vegetative Benchmarks (Efromyson *et al* ., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
e = Canadian Environmental Quality Guidelines - Residential/Parkland Standards, 2002
f = NOAA Screening Quick Reference Tables, Urban Park/Residential Target, 1999
g = ORNL Soil Invertebrate Benchmark (Efromyson *et al.* , 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
R = Data point was rejected, therefore the hazard quotient could not be calculated
NR = Analyte not analyzed

Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	SITE Q AT-Q-33-SS 5/26/05 0.5 Ft NR	AT-Q-34-SS 5/26/05 0.5 Ft NR	AT-Q-35-SS 5/26/05 0.5 Ft NR	AT-Q-36-SS 5/26/05 0.5 Ft NR	SA-Q-9-SS 5/26/05 0.5 Ft NR	SA-Q-10-SS 5/26/05 0.5 Ft NR	SA-Q-10-SS-D 5/26/05 0.5 Ft NR	SA-Q-11-SS 5/26/05 0.5 Ft NR	SA-Q-12-SS 5/26/05 0.5 Ft NR	SA-Q-14-SS 5/26/05 0.5 Ft NR	SA-Q-15-SS 5/26/05 0.5 Ft NR	SA-Q-16-SS 5/26/05 0.5 Ft NR
PCBs (ug/kg)	**Benchmark**														
Total PCBs	40000	a	NP	2.1E-02	NR	NR	1.9E-02	1.2E-03	3.0E-03	3.0E-04	2.5E-02	1.4E-02	1.4E-01	5.6E-02	4.8E-04
Dioxins/Furans (ug/kg)															
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.0010	c	0.010	***2.1E+00***	NR	NR	**1.8E+01**	***2.0E+00***	**1.3E+02**	**7.6E+01**	**3.7E+01**	**2.6E+02**	**4.4E+01**	**3.1E+01**	***3.5E+00***
1,2,3,4,6,7,8-HpCDF	0.0010	c	0.010	6.5E-01	NR	NR	***3.5E+00***	7.5E-01	**3.2E+01**	**1.6E+01**	**1.2E+01**	**1.5E+01**	**1.4E+01**	***3.3E+00***	***1.6E+00***
1,2,3,4,7,8,9-HpCDF	0.0010	c	0.010	3.5E-01	NR	NR	***1.2E+00***	4.8E-01	***1.3E+00***	8.5E-01	7.0E-01	***1.1E+00***	***1.1E+00***	***1.1E+00***	5.5E-01
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	***5.5E+00***	NR	NR	***7.0E+00***	***4.4E+00***	***2.5E+01***	***1.9E+01***	***1.8E+01***	***2.8E+01***	***8.0E+00***	***1.2E+01***	***4.5E+00***
1,2,3,4,7,8-HxCDF	0.0010	c	0.10	***2.6E+00***	NR	NR	***2.0E+00***	***2.6E+00***	**1.1E+02**	***1.9E+01***	***2.6E+01***	***8.5E+00***	***2.6E+01***	***1.1E+01***	***3.8E+00***
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	***4.6E+00***	NR	NR	***6.0E+00***	***4.0E+00***	***3.1E+01***	***2.3E+01***	***1.5E+01***	***3.0E+01***	***1.2E+01***	***1.0E+01***	***3.8E+00***
1,2,3,6,7,8-HxCDF	0.0010	c	0.10	***2.4E+00***	NR	NR	***1.4E+01***	***2.1E+00***	***2.9E+01***	***1.5E+01***	***4.3E+00***	***7.5E+00***	***1.0E+01***	***2.4E+00***	***3.2E+00***
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	***4.6E+00***	NR	NR	***6.0E+00***	***3.9E+00***	**8.1E+01**	***3.5E+01***	***1.0E+01***	***1.4E+01***	***6.5E+00***	***9.5E+00***	***3.7E+00***
1,2,3,7,8,9-HxCDF	0.0010	c	0.10	***1.7E+00***	NR	NR	***2.7E+00***	***1.8E+00***	***1.2E+01***	***9.0E+00***	***3.5E+00***	***2.9E+00***	***8.5E+00***	***1.1E+01***	***3.1E+00***
1,2,3,7,8-Pentachlorodibenzofuran	0.0010	c	0.050	***1.4E+00***	NR	NR	***3.3E+00***	9.0E-01	***7.5E+00***	***5.5E+00***	***3.5E+00***	***1.4E+00***	***3.3E+00***	***1.5E+00***	8.3E-01
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.0010	c	1.0	***5.0E+01***	NR	NR	***4.7E+01***	***4.4E+01***	***1.4E+02***	***1.1E+02***	***5.5E+01***	***4.8E+01***	***1.2E+02***	***4.3E+01***	***3.0E+01***
2,3,4,6,7,8-HxCDF	0.0010	c	0.10	***2.2E+00***	NR	NR	***2.0E+01***	***1.8E+00***	***3.6E+01***	***2.1E+01***	***8.0E+00***	***1.6E+01***	***1.6E+01***	***5.5E+00***	***1.6E+01***
2,3,4,7,8-PeCDF	0.0010	c	0.50	***1.4E+01***	NR	NR	***2.1E+01***	***1.2E+01***	***1.3E+02***	***9.3E+01***	***2.2E+01***	***1.6E+01***	***6.0E+01***	***2.5E+01***	***1.4E+01***
2,3,7,8-TCDD	0.0010	c	1.0	***3.4E+01***	NR	NR	***3.7E+01***	***3.2E+01***	***1.1E+02***	***1.1E+02***	***9.5E+01***	***8.0E+01***	***9.0E+01***	***1.7E+01***	***2.0E+01***
2,3,7,8-Tetrachlorodibenzofuran	0.0010	c	0.10	***4.2E+00***	NR	NR	***1.2E+01***	***2.6E+00***	**1.5E+02**	**1.1E+02**	**4.7E+01**	***4.3E+00***	**6.9E+01**	***1.1E+01***	***2.1E+00***
OCDD	0.0010	c	0.00010	5.7E-01	NR	NR	**2.3E+00**	7.3E-01	**8.2E+00**	**3.9E+00**	**4.7E+00**	**3.1E+01**	**4.1E+00**	**4.5E+00**	**1.4E+00**
OCDF	0.0010	c	0.00010	2.7E-02	NR	NR	9.0E-02	3.0E-02	4.7E-01	2.0E-01	3.1E-01	5.8E-01	2.6E-01	3.6E-01	6.5E-02
Total HpCDD	0.0010	c	0.010	***2.1E+00***	NR	NR	**3.4E+01**	***2.4E+00***	**2.6E+02**	**1.4E+02**	**6.5E+01**	**5.0E+02**	**8.3E+01**	**6.1E+01**	**7.3E+00**
Total HpCDF	0.0010	c	0.010	***2.9E+00***	NR	NR	***5.5E+00***	***1.7E+00***	**6.1E+01**	**2.9E+01**	**3.2E+01**	**8.0E+01**	**3.6E+01**	**1.8E+01**	***3.3E+00***
Total HxCDD	0.0010	c	0.10	***5.5E+00***	NR	NR	***7.0E+00***	***4.4E+00***	**6.7E+02**	**4.1E+02**	***3.0E+01***	**2.9E+02**	**2.0E+02**	***1.2E+01***	***4.5E+00***
Total HxCDF	0.0010	c	0.10	***1.1E+01***	NR	NR	***1.7E+01***	***1.3E+01***	**2.7E+02**	**2.0E+02**	***2.6E+01***	**1.4E+02**	***3.5E+01***	***2.0E+01***	***2.7E+01***
Total PeCDD	0.0010	c	1.0	***7.0E+01***	NR	NR	***7.0E+01***	***7.0E+01***	***2.1E+02***	***1.1E+02***	***5.5E+01***	***7.5E+01***	***1.2E+02***	***4.3E+01***	***5.0E+01***
Total PeCDF	0.0010	c	0.50	***2.3E+01***	NR	NR	***6.3E+01***	***1.3E+01***	**1.6E+03**	**5.0E+02**	***1.2E+02***	***3.5E+01***	***1.7E+02***	***4.5E+01***	***1.4E+01***
Total TCDD	0.0010	c	1.0	***3.4E+01***	NR	NR	***3.7E+01***	***3.2E+01***	**1.1E+03**	**1.1E+03**	**3.5E+02**	***8.0E+01***	**9.3E+02**	***1.7E+01***	***2.0E+01***
Total TCDF	0.0010	c	0.10	***6.0E+00***	NR	NR	***1.3E+01***	***3.8E+00***	**6.5E+02**	**2.7E+02**	**8.6E+01**	***4.8E+00***	**1.8E+02**	***1.2E+01***	***4.6E+00***
Metals (mg/kg)															
Aluminum	50	a		**1.0E+02**	**1.6E+02**	**1.7E+02**	**1.7E+02**	**2.2E+02**	**2.4E+02**	**2.0E+02**	**1.7E+02**	**2.0E+02**	**2.4E+02**	**2.2E+02**	**1.6E+02**
Antimony	5.0	a		2.8E-01	1.2E-01	2.8E-01	2.4E-01	1.0E-01	5.2E-01	3.0E-01	4.8E-01	2.3E-01	5.6E-01	1.7E-01	2.1E-01
Arsenic	10	a		**1.3E+00**	6.5E-01	8.3E-01	6.4E-01	6.3E-01	7.9E-01	5.8E-01	8.5E-01	4.8E-01	8.5E-01	6.1E-01	4.2E-01
Barium	500	a		3.4E-01	3.4E-01	**2.6E+00**	**1.3E+00**	3.0E-01	**1.2E+00**	6.0E-01	**1.6E+00**	9.2E-01	**1.6E+00**	6.6E-01	3.2E-01
Beryllium	10	a		4.3E-02	7.2E-02	6.4E-02	6.4E-02	8.5E-02	8.4E-02	5.8E-02	5.7E-02	6.5E-02	9.0E-02	5.8E-02	5.0E-02
Cadmium	4	a		**2.0E+03**	6.8E-01	6.5E-01	**1.2E+00**	3.5E-01	**1.8E+00**	**1.1E+00**	**4.0E+00**	5.3E-01	**2.8E+00**	5.3E-01	2.0E-01
Calcium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Chromium	1.0	a		**9.9E+00**	**1.5E+01**	**7.0E+01**	**3.1E+01**	**1.9E+01**	**4.8E+01**	**2.8E+01**	**1.1E+02**	**2.2E+01**	**6.0E+01**	**3.2E+01**	**1.3E+01**
Cobalt	20	a		2.7E-01	3.6E-01	3.4E-01	5.5E-01	4.0E-01	4.1E-01	3.6E-01	7.5E-01	3.6E-01	6.5E-01	3.7E-01	2.9E-01
Copper	100	a		**4.6E+00**	3.8E-01	**1.6E+00**	**1.6E+00**	3.6E-01	**8.1E+00**	**2.3E+00**	**4.3E+00**	6.6E-01	**3.1E+00**	**1.0E+00**	3.0E-01
Iron	200	b	NP	**4.9E+01**	**6.5E+01**	**1.0E+02**	**8.5E+01**	**9.0E+01**	**1.9E+02**	**1.1E+02**	**1.3E+02**	**8.5E+01**	**1.3E+02**	**9.5E+01**	**6.5E+01**
Lead	50	a		**3.6E+00**	**1.1E+00**	**6.4E+00**	**7.8E+00**	7.6E-01	**1.6E+01**	**7.2E+00**	**2.2E+01**	**2.4E+00**	**1.0E+01**	**3.0E+00**	6.2E-01
Magnesium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Manganese	500	a		7.2E-01	8.8E-01	9.0E-01	7.2E-01	**1.0E+00**	**1.1E+00**	7.4E-01	9.0E-01	8.6E-01	**1.8E+00**	**1.0E+00**	7.6E-01
Mercury	0.30	a		8.3E-01	2.4E-01	**4.7E+02**	**2.2E+00**	NR	**1.4E+00**	8.0E-01	**3.3E+00**	**2.3E+00**	**2.0E+00**	**3.3E+00**	5.7E-01
Nickel	30	a		5.7E-01	6.3E-01	9.0E-01	**1.0E+00**	6.7E-01	**1.1E+00**	8.0E-01	**1.6E+00**	7.0E-01	**2.4E+00**	9.3E-01	5.0E-01
Potassium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Selenium	1.0	a		***1.4E+00***	***1.4E+00***	***1.8E+00***	***1.4E+00***	***1.4E+00***	***1.4E+00***	***1.4E+00***	**1.4E+00**	***1.4E+00***	**1.8E+00**	***1.4E+00***	***1.4E+00***
Silver	2.0	a		1.7E-01	7.5E-02	2.7E-01	4.2E-01	7.5E-02	**2.3E+00**	**1.1E+00**	**1.9E+00**	1.9E-01	9.0E-01	2.7E-01	2.8E-01
Sodium	NC	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Thallium	1.0	a		**3.3E+00**	***1.4E+00***	***1.8E+00***	***1.4E+00***	***1.4E+00***	***1.4E+00***	***1.4E+00***	***1.5E+00***	***1.4E+00***	***1.4E+00***	***1.4E+00***	***1.4E+00***
Vanadium	2.0	a		**8.0E+00**	**1.2E+01**	**1.2E+01**	**1.3E+01**	**1.5E+01**	**1.3E+01**	**1.3E+01**	**1.3E+01**	**1.3E+01**	**1.5E+01**	**1.3E+01**	**1.1E+01**
Zinc	50	a		**2.4E+02**	**5.8E+00**	**1.6E+01**	**1.2E+01**	**4.8E+00**	**2.8E+01**	**1.6E+01**	**2.6E+01**	**6.4E+00**	**2.4E+01**	**7.8E+00**	**2.0E+00**

NOTES:
a = ORNL Vegetative Benchmarks (Efromyson *et al* ., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
e = Canadian Environmental Quality Guidelines - Residential/Parkland Standards, 2002
f = NOAA Screening Quick Reference Tables, Urban Park/Residential Target, 1999
g = ORNL Soil Invertebrate Benchmark (Efromyson *et al.* , 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
R = Data point was rejected, therefore the hazard quotient could not be calculated
NR = Analyte not analyzed

Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	SITE R				SITE S	
				SOIL-R-1 07/11/02 0.5 Ft 7.2	SOIL-R-2 07/11/02 0.5 Ft 5.7	SOIL-R-3 07/12/02 0.5 Ft 5.3	SOIL-R-4 07/12/02 0.5 Ft 10.3	SOIL-S-1 07/10/02 0.5 Ft 6.9	SA-S-1-SS 5/26/05 0.5 Ft NR
VOCs (ug/kg)	**Benchmark**								
1,1,1-Trichloroethane	100	b,i		3.6E-02	2.8E-02	3.3E-02	2.7E-02	2.7E-02	6.6E-02
1,1,2,2-Tetrachloroethane	5000	f		7.1E-04	5.5E-04	6.6E-04	5.3E-04	5.4E-04	4.5E-04
1,1,2-Trichloroethane	100	b,i		3.6E-02	2.8E-02	3.3E-02	2.7E-02	2.7E-02	2.3E-02
1,1-Dichloroethane	100	b,i		3.6E-02	2.8E-02	3.3E-02	2.7E-02	2.7E-02	5.6E-02
1,1-Dichloroethylene	100	b,i		3.6E-02	2.8E-02	3.3E-02	2.7E-02	2.7E-02	2.3E-02
1,2-Dichloroethane	100	b,i		3.6E-02	2.8E-02	2.6E-02	1.5E-02	2.7E-02	2.3E-02
1,2-Dichloroethene (total)	100	b,i		7.0E-02	5.5E-02	9.4E-03	5.5E-02	5.5E-02	4.5E-02
1,2-Dichloropropane	700000	g		5.1E-06	3.9E-06	4.7E-06	3.8E-06	3.9E-06	3.2E-06
2-Butanone (MEK)	NC	NA		NC	NC	NC	NC	NC	NC
2-Hexanone	NC	NA		NC	NC	NC	NC	NC	NC
4-Methyl-2-pentanone (MIBK)	NC	NA		NC	NC	NC	NC	NC	NC
Acetone	NC	NA		NC	NC	NC	NC	NC	NC
Benzene	50	b		1.4E-02	4.2E-02	2.8E-02	3.2E-02	5.4E-02	3.0E-02
Bromodichloromethane	NC	NA		NC	NC	NC	NC	NC	NC
Bromoform	NC	NA		NC	NC	NC	NC	NC	NC
Bromomethane	NC	NA	NP	NC	NC	NC	NC	NC	NC
Carbon Disulfide	NC	NA		NC	NC	NC	NC	NC	NC
Carbon Tetrachloride	1000000	b		3.6E-06	2.8E-06	3.3E-06	2.7E-06	2.7E-06	2.3E-06
Chlorobenzene	40000	g		8.9E-05	1.6E-03	6.5E-05	4.5E-05	6.8E-05	5.6E-05
Chloroethane	NC	NA		NC	NC	NC	NC	NC	NC
Chloroform	5.0	c,i		7.1E-01	5.5E-01	6.6E-01	5.3E-01	5.4E-01	4.5E-01
Chloromethane	NC	NA		NC	NC	NC	NC	NC	NC
cis-1,3-Dichloropropene	5.0	c,i		7.1E-01	5.5E-01	6.6E-01	5.3E-01	5.4E-01	4.5E-01
Dibromochloromethane	NC	NA		NC	NC	NC	NC	NC	NC
Ethylbenzene	50	b		4.8E-03	3.8E-02	7.6E-03	6.2E-03	5.4E-02	2.2E-02
Methylene Chloride	5000	e		7.1E-04	5.5E-04	6.6E-04	5.3E-04	5.4E-04	4.5E-04
Styrene (Monomer)	300000	a		1.2E-05	9.2E-06	1.1E-05	8.8E-06	9.0E-06	7.5E-06
Tetrachloroethene	10	b		3.6E-01	**1.2E+00**	2.6E-01	**1.0E+00**	2.7E-01	3.0E-01
Toluene	200000	a		1.8E-05	1.4E-05	1.7E-05	9.0E-06	1.4E-05	3.1E-05
trans-1,3-Dichloropropene	5.0	c,i		7.1E-01	5.5E-01	6.6E-01	5.3E-01	5.4E-01	4.5E-01
Trichloroethylene	5.0	c		7.1E-01	6.0E-02	**2.4E+00**	**3.8E+00**	5.4E-01	3.8E-01
Vinyl chloride	10	b		7.0E-01	5.5E-01	6.5E-01	5.5E-01	5.5E-01	2.3E-01
Xylenes, Total	50	b		1.4E-01	1.8E-01	2.6E-02	1.9E-02	1.1E-01	8.8E-02
SVOCs (ug/kg)									
1,2,4-Trichlorobenzene	20000	g		8.8E-03	8.8E-03	9.3E-03	9.0E-03	**1.8E+00**	1.2E-02
1,2-Dichlorobenzene	1.0	c		***1.8E+02***	***1.8E+02***	***1.9E+02***	***1.8E+02***	**3.7E+04**	***2.3E+02***
1,3-Dichlorobenzene	1.0	c		***1.8E+02***	***1.8E+02***	***1.9E+02***	***1.8E+02***	**1.0E+03**	***2.3E+02***
1,4-Dichlorobenzene	20000	g		8.8E-03	8.8E-03	9.3E-03	9.0E-03	3.8E-01	1.2E-02
2,2'-Oxybis(1-Chloropropane)	NC	NA		NC	NC	NC	NC	NC	NC
2,4,5-Trichlorophenol	4000	a		4.4E-02	4.4E-02	4.6E-02	4.5E-02	2.8E-01	5.8E-02
2,4,6-Trichlorophenol	10000	g		1.8E-02	1.8E-02	1.9E-02	1.8E-02	8.2E-01	2.3E-02
2,4-Dichlorophenol	0.50	c		***3.5E+02***	***3.5E+02***	***3.7E+02***	***3.6E+02***	**4.6E+03**	***4.6E+02***
2,4-Dimethylphenol	1.0	c		***1.8E+02***	***1.8E+02***	***1.9E+02***	***1.8E+02***	***7.0E+03***	***2.3E+02***
2,4-Dinitrophenol	20000	a		4.5E-02	4.5E-02	4.8E-02	4.5E-02	***1.9E+00***	6.0E-02
2,4-Dinitrotoluene	NC	NA		NC	NC	NC	NC	NC	NC
2,6-Dinitrotoluene	NC	NA		NC	NC	NC	NC	NC	NC
2-Chloronaphthalene	NC	NA		NC	NC	NC	NC	NC	NC
2-Chlorophenol	0.50	c		***3.5E+02***	***3.5E+02***	***3.7E+02***	***3.6E+02***	***1.4E+04***	***4.6E+02***
2-Methylnaphthalene	NC	NA	NP	NC	NC	NC	NC	NC	NC
2-Methylphenol (o-Cresol)	1.0	c		***1.8E+02***	***1.8E+02***	***1.9E+02***	***1.8E+02***	***7.0E+03***	***2.3E+02***
2-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC
2-Nitrophenol	1.0	c		***1.8E+02***	***1.8E+02***	***1.9E+02***	***1.8E+02***	***7.0E+03***	***2.3E+02***
3,3'-Dichlorobenzidine	NC	NA		NC	NC	NC	NC	NC	NC
3/4-Methylphenol (m&p-Cresol)	1.0	c		***1.8E+02***	***1.8E+02***	***1.9E+02***	***1.8E+02***	***7.0E+03***	***2.3E+02***
3-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC
4,6-Dinitro-2-methylphenol	1.0	c		***9.0E+02***	***9.0E+02***	***9.5E+02***	***9.0E+02***	***3.7E+04***	***1.2E+03***
4-Bromophenyl Phenyl Ether	NC	NA		NC	NC	NC	NC	NC	NC
4-Chloro-3-methylphenol	NC	NA		NC	NC	NC	NC	NC	NC
4-Chloroaniline	NC	NA		NC	NC	NC	NC	NC	NC
4-Chlorophenyl Phenyl Ether	NC	NA		NC	NC	NC	NC	NC	NC
4-Nitroaniline	NC	NA		NC	NC	NC	NC	NC	NC
4-Nitrophenol	7000	g		1.3E-01	1.3E-01	1.4E-01	1.3E-01	***5.3E+00***	1.7E-01
Acenaphthene	20000	a		8.8E-03	8.8E-03	9.3E-03	9.0E-03	6.0E-02	1.2E-02
Acenaphthylene	NC	NA		NC	NC	NC	NC	NC	NC
Anthracene	100	b		***1.8E+00***	***1.8E+00***	***1.9E+00***	***1.8E+00***	***7.0E+01***	***2.3E+00***

NOTES:
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c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
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g = ORNL Soil Invertebrate Benchmark (Efromyson *et al.* , 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
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Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	SITE R				SITE S	
				SOIL-R-1 07/11/02 0.5 Ft 7.2	SOIL-R-2 07/11/02 0.5 Ft 5.7	SOIL-R-3 07/12/02 0.5 Ft 5.3	SOIL-R-4 07/12/02 0.5 Ft 10.3	SOIL-S-1 07/10/02 0.5 Ft 6.9	SA-S-1-SS 5/26/05 0.5 Ft NR
SVOCs (ug/kg)	**Benchmark**								
Benzo(a)anthracene	1.0	c		**3.0E+01**	***1.8E+02***	***1.9E+02***	**3.3E+01**	**8.0E+03**	***2.3E+02***
Benzo(a)pyrene	100	b		2.6E-01	***1.8E+00***	***1.9E+00***	3.3E-01	**5.4E+01**	***2.3E+00***
Benzo(b)fluoranthene	1.0	c		**3.0E+01**	***1.8E+02***	***1.9E+02***	**3.2E+01**	**6.6E+03**	***2.3E+02***
Benzo(g,h,i)perylene	NC	NA		NC	NC	NC	NC	NC	NC
Benzo(k)fluoranthene	1.0	c		**2.6E+01**	***1.8E+02***	***1.9E+02***	**3.5E+01**	**6.4E+03**	***2.3E+02***
bis(2-Chloroethoxy)methane	NC	NA		NC	NC	NC	NC	NC	NC
bis(2-Chloroethyl)ether	NC	NA		NC	NC	NC	NC	NC	NC
bis(2-Ethylhexyl)phthalate	30	h		**2.6E+00**	***5.8E+00***	***6.2E+00***	***6.0E+00***	**1.3E+02**	**1.8E+01**
Butyl Benzyl Phthalate	NC	NA		NC	NC	NC	NC	NC	NC
Carbazole	NC	NA		NC	NC	NC	NC	NC	NC
Chrysene	NC	NA		NC	NC	NC	NC	NC	NC
Dibenzo(a,h)anthracene	1.0	c		***1.8E+02***	***1.8E+02***	***1.9E+02***	***1.8E+02***	**1.8E+03**	***2.3E+02***
Dibenzofuran	NC	NA		NC	NC	NC	NC	NC	NC
Diethyl Phthalate	100000	a		1.8E-03	1.8E-03	1.9E-03	1.8E-03	7.0E-02	2.3E-03
Dimethyl Phthalate	200000	g		8.8E-04	8.8E-04	9.3E-04	9.0E-04	3.5E-02	1.2E-03
Di-n-butylphthalate	200000	a	NP	8.8E-04	8.8E-04	9.3E-04	9.0E-04	3.5E-02	1.2E-03
Di-n-octylphthalate	NC	NA		NC	NC	NC	NC	NC	NC
Fluoranthene	100	b		***1.8E+00***	***1.8E+00***	***1.9E+00***	3.9E-01	**4.2E+01**	***2.3E+00***
Fluorene	30000	g		5.8E-03	5.8E-03	6.2E-03	6.0E-03	4.0E-02	7.7E-03
Hexachlorobenzene	2.0	c		***8.8E+01***	***8.8E+01***	***9.3E+01***	***9.0E+01***	***3.5E+03***	***1.2E+02***
Hexachlorobutadiene	NC	NA		NC	NC	NC	NC	NC	NC
Hexachlorocyclopentadiene	10000	a		1.8E-02	1.8E-02	1.9E-02	1.8E-02	7.0E-01	2.3E-02
Hexachloroethane	NC	NA		NC	NC	NC	NC	NC	NC
Indeno(1,2,3-cd)pyrene	1.0	c		**4.3E+01**	***1.8E+02***	***1.9E+02***	***1.8E+02***	**1.3E+03**	***2.3E+02***
Isophorone	NC	NA		NC	NC	NC	NC	NC	NC
Naphthalene	600	e		2.9E-01	2.9E-01	3.1E-01	3.0E-01	**3.5E+00**	3.8E-01
Nitrobenzene	40000	g		4.4E-03	4.4E-03	4.6E-03	4.5E-03	1.8E-01	5.8E-03
N-Nitroso-di-n-propylamine	NC	NA		NC	NC	NC	NC	NC	NC
N-Nitrosodiphenylamine	20000	g		8.8E-03	8.8E-03	9.3E-03	9.0E-03	3.5E-01	1.2E-02
Pentachlorophenol	3000	a		1.5E-02	1.5E-02	1.3E-02	4.3E-03	**1.5E+02**	6.0E-03
Phenanthrene	5.0	c		**4.2E+00**	***3.5E+01***	***3.7E+01***	**6.0E+00**	**1.8E+03**	***4.6E+01***
Phenol	70000	a		2.5E-03	2.5E-03	2.6E-03	2.6E-03	1.0E-01	3.3E-03
Pyrene	10	c		***1.8E+01***	***1.8E+01***	***1.9E+01***	**4.8E+00**	**2.8E+03**	***2.3E+01***
Pesticides (ug/kg)									
4,4'-DDD	10	d		3.6E-01	1.8E-01	1.9E-01	1.8E-01	**1.7E+02**	NR
4,4'-DDE	10	d		3.6E-01	1.8E-01	1.9E-01	1.8E-01	**3.3E+02**	NR
4,4'-DDT	10	c		2.7E-01	1.8E-01	1.9E-01	1.8E-01	**1.6E+03**	NR
Aldrin	2.5	b		7.2E-01	3.6E-01	3.8E-01	3.6E-01	***3.6E+02***	NR
alpha-BHC	2.5	b		7.2E-01	3.6E-01	3.8E-01	3.6E-01	***3.6E+02***	NR
alpha-Chlordane	NC	NA		NC	NC	NC	NC	NC	NR
beta-BHC	1.0	b		***1.8E+00***	9.0E-01	9.5E-01	9.0E-01	**2.6E+04**	NR
delta-BHC	NC	NA		NC	NC	NC	NC	NC	NR
Dieldrin	0.50	b		**2.8E+00**	***3.5E+00***	7.4E-01	**2.0E+00**	***3.6E+03***	NR
Endosulfan I	NC	NA	NP	NC	NC	NC	NC	NC	NR
Endosulfan II	NC	NA		NC	NC	NC	NC	NC	NR
Endosulfan Sulfate	NC	NA		NC	NC	NC	NC	NC	NR
Endrin	1.0	b		***3.6E+00***	***1.8E+00***	***1.9E+00***	***1.8E+00***	**1.0E+04**	NR
Endrin Aldehyde	NC	NA		NC	NC	NC	NC	NC	NR
Endrin Ketone	NC	NA		NC	NC	NC	NC	NC	NR
gamma-BHC (Lindane)	0.050	b		***3.6E+01***	***1.8E+01***	***1.9E+01***	***1.8E+01***	**1.5E+05**	NR
gamma-Chlordane	NC	NA		NC	NC	NC	NC	NC	NR
Heptachlor	NC	NA		NC	NC	NC	NC	NC	NR
Heptachlor Epoxide	NC	NA		NC	NC	NC	NC	NC	NR
Methoxychlor	NC	NA		NC	NC	NC	NC	NC	NR
Toxaphene	NC	NA		NC	NC	NC	NC	NC	NR
Herbicides (ug/kg)									
2,4-D	NC	NA		NC	NC	NC	NC	NC	NC
2,4-DB	NC	NA		NC	NC	NC	NC	NC	NC
2,4,5-T	NC	NA		NC	NC	NC	NC	NC	NC
2,4,5-TP (Silvex)	NC	NA		NC	NC	NC	NC	NC	NC
Dalapon	NC	NA	NP	NC	NC	NC	NC	NC	NC
Dicamba	NC	NA		NC	NC	NC	NC	NC	NC
Dichlorprop	NC	NA		NC	NC	NC	NC	NC	NC
Dinoseb	NC	NA		NC	NC	NC	NC	NC	NC
MCPA	NC	NA		NC	NC	NC	NC	NC	NC
MCPP	NC	NA		NC	NC	NC	NC	NC	NC

NOTES:
a = ORNL Vegetative Benchmarks (Efromyson *et al* ., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
e = Canadian Environmental Quality Guidelines - Residential/Parkland Standards, 2002
f = NOAA Screening Quick Reference Tables, Urban Park/Residential Target, 1999
g = ORNL Soil Invertebrate Benchmark (Efromyson *et al.* , 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
R = Data point was rejected, therefore the hazard quotient could not be calculated
NR = Analyte not analyzed

Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-31
Surface Soil Hazard Quotients
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	Reference for Benchmark	TEFs	SITE R				SITE S	
				SOIL-R-1 07/11/02 0.5 Ft 7.2	SOIL-R-2 07/11/02 0.5 Ft 5.7	SOIL-R-3 07/12/02 0.5 Ft 5.3	SOIL-R-4 07/12/02 0.5 Ft 10.3	SOIL-S-1 07/10/02 0.5 Ft 6.9	SA-S-1-SS 5/26/05 0.5 Ft NR
PCBs (ug/kg)	**Benchmark**								
Total PCBs	40000	a	NP	2.3E-04	2.3E-04	2.4E-04	1.7E-04	**2.5E+01**	NR
Dioxins/Furans (ug/kg)									
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.0010	c	0.010	8.0E-01	***1.5E+00***	7.5E-01	2.5E-01	**2.0E+00**	NR
1,2,3,4,6,7,8-HpCDF	0.0010	c	0.010	2.3E-01	***1.1E+00***	***1.2E+00***	***1.8E+00***	1.5E-01	NR
1,2,3,4,7,8,9-HpCDF	0.0010	c	0.010	1.2E-01	***1.8E+00***	***1.5E+00***	9.0E-01	5.5E-02	NR
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	***1.1E+00***	***1.3E+01***	***7.0E+00***	***1.4E+00***	2.6E-01	NR
1,2,3,4,7,8-HxCDF	0.0010	c	0.10	***1.0E+00***	***5.5E+00***	***6.0E+00***	***3.8E+00***	1.5E-01	NR
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	***1.2E+00***	***1.4E+01***	***7.5E+00***	***3.7E+00***	8.0E-01	NR
1,2,3,6,7,8-HxCDF	0.0010	c	0.10	7.5E-01	***7.5E+00***	***6.0E+00***	***2.7E+00***	9.0E-01	NR
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.0010	c	0.10	***1.2E+00***	***1.1E+01***	***6.5E+00***	***3.9E+00***	3.9E-01	NR
1,2,3,7,8,9-HxCDF	0.0010	c	0.10	9.0E-01	***5.5E+00***	***8.5E+00***	***5.5E+00***	2.9E-01	NR
1,2,3,7,8-Pentachlorodibenzofuran	0.0010	c	0.050	2.4E-01	***2.8E+00***	***1.0E+00***	8.0E-01	6.5E-02	NR
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.0010	c	1.0	***1.6E+01***	***8.5E+01***	***2.7E+01***	***1.0E+02***	***3.1E+00***	NR
2,3,4,6,7,8-HxCDF	0.0010	c	0.10	***1.1E+00***	***8.0E+00***	***9.0E+00***	***3.4E+00***	1.9E-01	NR
2,3,4,7,8-PeCDF	0.0010	c	0.50	***2.4E+00***	***3.8E+01***	***8.0E+00***	***1.4E+01***	9.3E-01	NR
2,3,7,8-TCDD	0.0010	c	1.0	***9.0E+00***	***5.5E+01***	***1.9E+01***	***1.1E+01***	***1.6E+00***	NR
2,3,7,8-Tetrachlorodibenzofuran	0.0010	c	0.10	4.9E-01	***6.0E+00***	***1.3E+00***	9.5E-01	6.0E-01	NR
OCDD	0.0010	c	0.00010	4.1E-01	4.9E-02	4.8E-02	1.5E-01	9.0E-01	NR
OCDF	0.0010	c	0.00010	6.0E-03	2.6E-02	3.3E-02	2.3E-02	7.0E-03	NR
Total HpCDD	0.0010	c	0.010	8.0E-01	***1.7E+00***	***3.1E+00***	2.5E-01	**4.0E+00**	NR
Total HpCDF	0.0010	c	0.010	3.5E-01	***2.0E+00***	***2.0E+00***	***1.8E+00***	4.8E-01	NR
Total HxCDD	0.0010	c	0.10	***1.6E+00***	***1.6E+01***	***7.5E+00***	***3.9E+00***	9.0E-01	NR
Total HxCDF	0.0010	c	0.10	***1.1E+00***	***8.0E+00***	***9.0E+00***	***6.5E+00***	9.0E-01	NR
Total PeCDD	0.0010	c	1.0	***6.5E+01***	***2.1E+02***	***1.6E+02***	***1.0E+02***	***3.0E+01***	NR
Total PeCDF	0.0010	c	0.50	***4.8E+00***	***3.8E+01***	***1.0E+01***	***1.8E+01***	***2.3E+00***	NR
Total TCDD	0.0010	c	1.0	***9.0E+00***	***5.5E+01***	***1.9E+01***	***1.1E+01***	***1.6E+00***	NR
Total TCDF	0.0010	c	0.10	7.5E-01	***9.5E+00***	***2.1E+00***	***3.2E+00***	6.0E-01	NR
Metals (mg/kg)									
Aluminum	50	a		**1.7E+02**	**1.5E+02**	**2.0E+02**	**1.7E+02**	**1.5E+02**	**1.9E+02**
Antimony	5.0	a		8.8E-02	1.9E-01	2.2E-01	2.0E-01	1.2E-01	2.4E-01
Arsenic	10	a		7.2E-01	5.5E-01	6.6E-01	6.1E-01	5.8E-01	6.6E-01
Barium	500	a		3.0E-01	2.2E-01	2.4E-01	2.4E-01	2.4E-01	2.2E-01
Beryllium	10	a		6.8E-02	4.8E-02	6.0E-02	4.9E-02	4.6E-02	4.8E-02
Cadmium	4	a		1.2E-01	1.9E-01	7.0E-02	6.1E-02	2.1E-01	1.9E-01
Calcium	NC	NA		NC	NC	NC	NC	NC	NC
Chromium	1.0	a		**1.7E+01**	**1.3E+01**	**1.7E+01**	**1.4E+01**	**2.3E+01**	**1.7E+01**
Cobalt	20	a		7.5E-01	3.5E-01	4.2E-01	3.4E-01	4.7E-01	3.7E-01
Copper	100	a		2.3E-01	2.5E-01	1.5E-01	1.5E-01	2.3E-01	2.0E-01
Iron	200	b	NP	**9.0E+01**	**7.5E+01**	**9.0E+01**	**8.0E+01**	**6.5E+01**	**7.5E+01**
Lead	50	a		6.6E-01	3.8E-01	2.0E-01	1.7E-01	**1.3E+00**	5.2E-01
Magnesium	NC	NA		NC	NC	NC	NC	NC	NC
Manganese	500	a		**2.4E+00**	**1.1E+00**	**1.4E+00**	**1.1E+00**	**1.3E+00**	**1.1E+00**
Mercury	0.30	a		1.2E-01	2.5E-01	2.0E-01	2.1E-01	2.5E-01	2.1E-01
Nickel	30	a		6.7E-01	5.7E-01	7.0E-01	6.0E-01	6.7E-01	5.3E-01
Potassium	NC	NA		NC	NC	NC	NC	NC	NC
Selenium	1.0	a		4.9E-01	4.9E-01	5.5E-01	5.0E-01	5.0E-01	***1.5E+00***
Silver	2.0	a		2.5E-01	2.4E-01	2.8E-01	2.5E-01	2.5E-01	3.0E-01
Sodium	NC	NA		NC	NC	NC	NC	NC	NC
Thallium	1.0	a		4.9E-01	4.9E-01	5.5E-01	5.0E-01	5.0E-01	***1.5E+00***
Vanadium	2.0	a		**1.7E+01**	**1.4E+01**	**1.5E+01**	**1.5E+01**	**1.2E+01**	**1.4E+01**
Zinc	50	a		**1.8E+00**	**2.4E+00**	9.4E-01	8.6E-01	**2.2E+00**	**1.5E+00**

NOTES:
a = ORNL Vegetative Benchmarks (Efromyson *et al* ., 1997a)
b = USEPA Region IV Soil Screening Benchmarks, 2001
c = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Urban Park Standards
d = Based on 4,4'-DDT
e = Canadian Environmental Quality Guidelines - Residential/Parkland Standards, 2002
f = NOAA Screening Quick Reference Tables, Urban Park/Residential Target, 1999
g = ORNL Soil Invertebrate Benchmark (Efromyson *et al.* , 1997b)
h = Canadian Soil Screening Values - British Columbia Regulation 375/96, 1997 - Agricultural Standards
i = Based on aliphatic chlorinated hydrocarbons.
NC = No appropriate soil screening value available, therefore the hazard quotient could not be calculated
NA = Not available
NP = Not applicable
R = Data point was rejected, therefore the hazard quotient could not be calculated
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Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-32
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Off-Site Areas (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs																(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	6.5E+01	2.9E-02	8.0E-03
1,2-Dichlorobenzene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+02	1.4E+03	5.0E-03	3.6E-04
1,3-Dichlorobenzene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+02	1.4E+03	5.0E-03	3.6E-04
1,4-Dichlorobenzene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+02	1.8E+02	5.0E-03	2.8E-03
2,2'-Oxybis(1-Chloropropane)	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
2,4,5-Trichlorophenol	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E+01	3.6E+01	4.3E-02	1.4E-02
2,4,6-Trichlorophenol	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	6.0E+02	3.6E+01	8.5E-04	1.4E-02
2,4-Dichlorophenol	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.6E-01	3.6E+00	1.4E+00	1.4E-01
2,4-Dinitrophenol	***9.9E-01***	0.0012	1.0	7.7E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	1.6E-03	1.6E-02	1.6E+03	1.6E+02
2,4-Dinitrotoluene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.0E-01	2.2E+00	1.7E+00	2.3E-01
2,6-Dinitrotoluene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	8.5E-01	8.5E+00	6.1E-01	6.1E-02
2-Chloronaphthalene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.6E+01	6.3E+01	2.0E-02	8.2E-03
2-Chlorophenol	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	6.0E+01	6.0E+00	8.5E-03	8.5E-02
2-Methylnaphthalene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.0E+03	3.0E+04	1.7E-04	1.7E-05
2-Methylphenol (o-Cresol)	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.8E+02	2.8E+03	1.8E-03	1.8E-04
2-Nitroaniline	***9.9E-01***	0.0012	1.0	7.7E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
2-Nitrophenol	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.0E+00	8.5E+00	1.7E-01	6.1E-02
3,3'-Dichlorobenzidine	***3.8E-01***	0.0012	1.0	3.0E-02	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.0E+00	1.6E+01	5.3E+02	6.6E-02	1.9E-03
3/4-Methylphenol (m&p-Cresol)	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.8E+02	2.8E+03	1.8E-03	1.8E-04
3-Nitroaniline	***9.9E-01***	0.0012	1.0	7.7E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
4,6-Dinitro-2-methylphenol	***9.9E-01***	0.0012	1.0	7.7E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	3.0E-01	5.5E+00	8.6E+00	4.7E-01
4-Bromophenyl Phenyl Ether	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E+00	9.7E+00	4.3E-01	5.3E-02
4-Chloro-3-methylphenol	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.4E+02	1.4E+03	3.8E-03	3.8E-04
4-Chloroaniline	***3.8E-01***	0.0012	1.0	3.0E-02	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.0E+00	1.5E+00	1.5E+01	6.8E-01	6.8E-02
4-Chlorophenyl Phenyl Ether	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E+00	9.7E+00	4.3E-01	5.3E-02
4-Nitroaniline	***9.9E-01***	0.0012	1.0	7.7E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
4-Nitrophenol	***9.9E-01***	0.0012	1.0	7.7E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	3.0E+00	8.5E+00	8.6E-01	3.1E-01
Acenaphthene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Acenaphthylene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Anthracene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+02	1.0E+03	4.9E-03	4.9E-04
Benzo(a)anthracene	7.0E-02	0.0012	1.0	5.5E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.8E-01	4.8E-02
Benzo(a)pyrene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(b)fluoranthene	1.5E-01	0.0012	1.0	1.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(g,h,i)perylene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(k)fluoranthene	7.3E-02	0.0012	1.0	5.7E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
bis(2-Chloroethoxy)methane	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
bis(2-Chloroethyl)ether	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
bis(2-Ethylhexyl)phthalate	2.2E-01	0.0012	1.0	1.7E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.3E+01	1.3E+02	4.1E-02	4.1E-03
Butyl Benzyl Phthalate	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.9E+01	5.7E+01	2.7E-02	9.1E-03
Carbazole	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.1E+00	3.1E+01	1.6E-01	1.6E-02
Chrysene	7.7E-02	0.0012	1.0	6.0E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Dibenzo(a,h)anthracene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Dibenzofuran	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.6E-02	1.6E-01	3.2E+01	3.2E+00
Diethyl Phthalate	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	5.6E+03	5.6E+04	9.2E-05	9.2E-06
Dimethyl Phthalate	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	4.8E+03	4.8E+04	1.1E-04	1.1E-05
Di-n-butylphthalate	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	7.7E-01	1.0	0.67	3.1E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.2E-01	4.3E+02	1.4E+03	9.7E-04	2.9E-04
Di-n-octylphthalate	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	5.7E+02	1.9E+03	9.0E-04	2.7E-04
Fluoranthene	1.2E-01	0.0012	1.0	9.4E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.3E+01	2.6E+01	3.9E-02	2.0E-02
Fluorene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.3E+01	2.6E+01	4.0E-02	2.0E-02
Hexachlorobenzene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	9.7E-02	3.5E-01	5.3E+00	1.5E+00
Hexachlorobutadiene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.4E-01	2.4E-01	2.1E+00	2.1E+00
Hexachlorocyclopentadiene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	7.2E-01	1.3E+00	7.1E-01	3.9E-01
Hexachloroethane	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E-01	1.8E+00	4.3E+00	2.8E-01
Indeno(1,2,3-cd)pyrene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Isophorone	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.2E+01	2.2E+02	2.3E-02	2.4E-03
Naphthalene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	8.6E+00	1.7E+01	6.0E-02	3.0E-02
Nitrobenzene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	4.8E-02	4.8E-01	1.1E+01	1.1E+00
N-Nitroso-di-n-propylamine	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E-02	1.0E-01	4.9E+01	4.9E+00
N-Nitrosodiphenylamine	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.4E+02	6.0E+01	2.1E-03	8.5E-03
Pentachlorophenol	4.9E-03	0.0012	1.0	3.8E-04	0.0090	4.0E-02	1.0	0.67	1.6E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	2.1E-02	4.3E-01	4.3E+00	5.0E-02	5.0E-03
Phenanthrene	7.7E-02	0.0012	1.0	6.0E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Phenol	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	7.2E+01	1.4E+02	7.1E-03	3.6E-03
Pyrene	1.2E-01	0.0012	1.0	9.6E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	7.8E+00	1.3E+01	6.5E-02	3.9E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values.
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-32
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Off-Site Areas (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																NOAEL	LOAEL	NOAEL HQ	LOAEL HQ
Pesticides																			
4,4'-DDD	3.2E-03	0.0012	1.0	2.5E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.3E-03	3.4E-01	1.7E+00	2.7E-02	5.4E-03
4,4'-DDE	7.6E-03	0.0012	1.0	5.9E-04	0.0090	1.7E-02	1.0	0.67	6.6E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	8.2E-03	3.4E-01	1.7E+00	2.4E-02	4.8E-03
4,4'-DDT	2.2E-02	0.0012	1.0	1.7E-03	0.0090	3.6E-02	1.0	0.67	1.4E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.7E-02	3.4E-01	1.7E+00	5.0E-02	9.9E-03
Aldrin	***9.9E-04***	0.0012	1.0	7.7E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.9E-03	0.33	3.7E-04	0.015	1.0	4.5E-03	3.1E-01	1.6E+00	1.4E-02	2.9E-03
alpha-BHC	***9.9E-04***	0.0012	1.0	7.7E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	2.5E+00	5.1E+00	1.8E-03	9.1E-04
alpha-Chlordane	***9.9E-04***	0.0012	1.0	7.7E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	5.2E+00	1.0E+01	8.9E-04	4.4E-04
beta-BHC	***9.9E-04***	0.0012	1.0	7.7E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	6.3E-01	3.2E+00	7.3E-03	1.5E-03
delta-BHC	***9.9E-04***	0.0012	1.0	7.7E-05	0.0090	7.4E-03	1.0	0.67	3.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	3.4E-03	2.5E+00	5.1E+00	1.3E-03	6.7E-04
Dieldrin	4.6E-03	0.0012	1.0	3.6E-04	0.0090	1.5E-02	1.0	0.67	6.1E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	7.4E-03	1.7E-02	1.7E-01	4.4E-01	4.4E-02
Endosulfan I	1.1E-03	0.0012	1.0	8.5E-05	0.0090	7.3E-03	1.0	0.67	2.9E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	3.5E-03	5.9E-01	5.9E+00	5.9E-03	5.9E-04
Endosulfan II	1.6E-03	0.0012	1.0	1.2E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.1E-03	5.9E-01	5.9E+00	1.5E-02	1.5E-03
Endosulfan Sulfate	1.4E-03	0.0012	1.0	1.1E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.1E-03	5.9E-01	5.9E+00	1.5E-02	1.5E-03
Endrin	***1.9E-03***	0.0012	1.0	1.5E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.2E-03	9.4E-02	9.4E-01	9.7E-02	9.7E-03
Endrin Aldehyde	2.2E-03	0.0012	1.0	1.7E-04	0.0090	1.5E-02	1.0	0.67	5.9E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	7.1E-03	9.4E-02	9.4E-01	7.5E-02	7.5E-03
Endrin Ketone	***1.9E-03***	0.0012	1.0	1.5E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	4.2E-03	0.33	8.3E-04	0.015	1.0	9.0E-03	9.4E-02	9.4E-01	9.6E-02	9.6E-03
gamma-BHC (Lindane)	***9.9E-04***	0.0012	1.0	7.7E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	4.4E-03	2.7E+01	2.7E+02	1.6E-04	1.6E-05
gamma-Chlordane	***9.9E-04***	0.0012	1.0	7.7E-05	0.0090	4.8E-03	1.0	0.67	1.9E-03	1.6E-03	0.33	3.2E-04	0.015	1.0	2.3E-03	5.2E+00	1.0E+01	4.5E-04	2.2E-04
Heptachlor	***9.9E-04***	0.0012	1.0	7.7E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.7E-03	0.33	3.4E-04	0.015	1.0	4.4E-03	7.0E-02	7.0E-01	6.4E-02	6.4E-03
Heptachlor Epoxide	1.3E-03	0.0012	1.0	1.0E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	9.5E-04	7.0E-03	4.9E+00	6.6E-01
Methoxychlor	8.2E-03	0.0012	1.0	6.4E-04	0.0090	7.2E-02	1.0	0.67	2.9E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	3.5E-02	2.0E+00	4.0E+00	1.8E-02	8.8E-03
Toxaphene	***9.9E-02***	0.0012	1.0	7.7E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***2.6E-01***	0.33	5.0E-02	0.015	1.0	4.6E-01	7.9E+00	7.9E+01	5.8E-02	5.8E-03
Herbicides																			
2,4-D	5.1E-03	0.0012	1.0	4.0E-04	0.0090	***3.3E-02***	1.0	0.67	1.3E-02	1.1E-01	0.33	2.2E-02	0.015	1.0	3.5E-02	1.9E+00	9.4E+00	1.9E-02	3.8E-03
2,4-DB	***4.8E-03***	0.0012	1.0	3.7E-04	0.0090	***3.3E-02***	1.0	0.67	1.3E-02	2.0E-02	0.33	4.0E-03	0.015	1.0	1.8E-02	3.1E+00	9.6E+00	5.8E-03	1.9E-03
2,4,5-T	***4.8E-03***	0.0012	1.0	3.7E-04	0.0090	3.4E-02	1.0	0.67	1.4E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	1.6E-02	3.6E+00	1.2E+01	4.5E-03	1.4E-03
2,4,5-TP (Silvex)	***4.8E-03***	0.0012	1.0	3.7E-04	0.0090	2.8E-02	1.0	0.67	1.1E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	1.4E-02	1.1E+00	3.7E+00	1.3E-02	3.8E-03
Dalapon	***1.2E+00***	0.0012	1.0	9.0E-02	0.0090	***8.0E+00***	1.0	0.67	3.2E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.9E+00	1.0E+01	3.5E+01	3.8E-01	1.1E-01
Dicamba	***1.2E-02***	0.0012	1.0	9.0E-04	0.0090	***8.0E-02***	1.0	0.67	3.2E-02	***3.0E-02***	0.33	5.9E-03	0.015	1.0	3.9E-02	3.9E+00	1.3E+01	1.0E-02	3.0E-03
Dichlorprop	8.4E-02	0.0012	1.0	6.5E-03	0.0090	***4.0E-01***	1.0	0.67	1.6E-01	***1.5E-01***	0.33	3.0E-02	0.015	1.0	2.0E-01	2.1E-01	2.1E+00	9.4E-01	9.4E-02
Dinoseb	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E-01	1.2E+00	4.3E+00	4.3E-01
MCPA	***1.2E+00***	0.0012	1.0	9.0E-02	0.0090	4.7E+01	1.0	0.67	1.9E+01	***3.0E+00***	0.33	5.9E-01	0.015	1.0	2.0E+01	2.2E-01	1.1E+00	8.8E+01	1.8E+01
MCPP	2.8E+00	0.0012	1.0	2.2E-01	0.0090	***8.0E+00***	1.0	0.67	3.2E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	4.0E+00	3.6E-01	1.1E+00	1.1E+01	3.7E+00
PCBs																			
Total PCBs	1.1E-01	0.0012	1.0	8.5E-03	0.0090	4.1E-02	1.0	0.67	1.6E-02	3.2E-02	0.33	6.2E-03	0.015	1.0	3.1E-02	1.2E-01	1.2E+00	2.6E-01	2.6E-02
Dioxins/Furans																			
TEQ	1.3E-04	0.0012	1.0	1.0E-05	0.0090	4.8E-06	1.0	0.67	1.9E-06	5.9E-07	0.33	1.2E-07	0.015	1.0	1.2E-05	1.2E-06	1.2E-05	1.0E+01	1.0E+00
Metals*																			
Aluminum	6.7E+03	0.0012	1.0	5.2E+02	0.0090	6.1E+02	1.0	0.67	2.5E+02	2.4E+01	0.33	4.8E+00	0.015	1.0	7.7E+02	2.0E+00	2.0E+01	3.8E+02	3.8E+01
Antimony	1.3E+00	0.0012	1.0	1.0E-01	0.0090	7.7E-01	1.0	0.67	3.1E-01	***9.0E-01***	0.33	1.8E-01	0.015	1.0	5.9E-01	1.3E-01	1.3E+00	4.6E+00	4.6E-01
Arsenic	7.4E+00	0.0012	1.0	5.8E-01	0.0090	5.8E+00	1.0	0.67	2.3E+00	***4.5E-01***	0.33	8.8E-02	0.015	1.0	3.0E+00	1.4E-01	1.4E+00	2.2E+01	2.2E+00
Barium	1.8E+02	0.0012	1.0	1.4E+01	0.0090	1.8E+01	1.0	0.67	7.4E+00	2.2E+00	0.33	4.3E-01	0.015	1.0	2.2E+01	1.1E+01	4.4E+01	1.9E+00	5.0E-01
Beryllium	5.0E-01	0.0012	1.0	3.9E-02	0.0090	***1.9E-01***	1.0	0.67	7.8E-02	***1.8E-01***	0.33	3.5E-02	0.015	1.0	1.5E-01	8.0E-01	8.0E+00	1.9E-01	1.9E-02
Cadmium	2.0E+00	0.0012	1.0	1.6E-01	0.0090	1.5E+00	1.0	0.67	6.0E-01	7.2E-01	0.33	1.4E-01	0.015	1.0	9.0E-01	5.8E+00	5.8E+01	1.5E-01	1.5E-02
Chromium	1.2E+01	0.0012	1.0	9.0E-01	0.0090	1.2E+00	1.0	0.67	5.0E-01	1.9E-01	0.33	3.8E-02	0.015	1.0	1.4E+00	4.0E+00	1.6E+01	3.6E-01	9.1E-02
Cobalt	5.4E+00	0.0012	1.0	4.2E-01	0.0090	1.6E+00	1.0	0.67	6.3E-01	***4.5E-01***	0.33	8.8E-02	0.015	1.0	1.1E+00	6.0E-02	6.0E-01	1.9E+01	1.9E+00
Copper	5.9E+01	0.0012	1.0	4.6E+00	0.0090	1.3E+01	1.0	0.67	5.3E+00	2.2E+01	0.33	4.4E+00	0.015	1.0	1.4E+01	1.5E+01	2.0E+01	9.5E-01	7.2E-01
Lead	7.9E+01	0.0012	1.0	6.2E+00	0.0090	1.0E+01	1.0	0.67	4.0E+00	1.0E+00	0.33	2.0E-01	0.015	1.0	1.0E+01	9.7E+00	9.7E+01	1.1E+00	1.1E-01
Manganese	2.8E+02	0.0012	1.0	2.2E+01	0.0090	3.4E+01	1.0	0.67	1.4E+01	1.1E+01	0.33	2.1E+00	0.015	1.0	3.8E+01	1.1E+02	3.4E+02	3.6E-01	1.1E-01
Mercury	8.5E-02	0.0012	1.0	6.6E-03	0.0090	5.8E-02	1.0	0.67	2.3E-02	1.5E-01	0.33	3.0E-02	0.015	1.0	6.0E-02	9.9E-02	4.9E-01	6.0E-01	1.2E-01
Nickel	1.8E+01	0.0012	1.0	1.4E+00	0.0090	2.7E+00	1.0	0.67	1.1E+00	***1.8E+00***	0.33	3.5E-01	0.015	1.0	2.8E+00	4.8E+01	9.7E+01	5.9E-02	2.9E-02
Selenium	5.6E-01	0.0012	1.0	4.3E-02	0.0090	5.1E-01	1.0	0.67	2.1E-01	***6.6E-01***	0.33	1.3E-01	0.015	1.0	3.8E-01	1.9E-01	3.2E-01	2.0E+00	1.2E+00
Silver	5.7E-01	0.0012	1.0	4.4E-02	0.0090	4.1E-01	1.0	0.67	1.6E-01	4.9E-01	0.33	9.6E-02	0.015	1.0	3.0E-01	1.9E-01	1.9E+00	1.6E+00	1.6E-01
Thallium	***5.4E-01***	0.0012	1.0	4.2E-02	0.0090	***4.9E-01***	1.0	0.67	1.9E-01	***4.5E-01***	0.33	8.8E-02	0.015	1.0	3.3E-01	1.4E-02	1.4E-01	2.4E+01	2.4E+00
Vanadium	2.2E+01	0.0012	1.0	1.7E+00	0.0090	2.1E+00	1.0	0.67	8.2E-01	***4.5E-01***	0.33	8.8E-02	0.015	1.0	2.6E+00	1.1E-01	1.1E+00	2.3E+01	2.3E+00
Zinc	2.4E+02	0.0012	1.0	1.9E+01	0.0090	5.2E+01	1.0	0.67	2.1E+01	6.2E+01	0.33	1.2E+01	0.015	1.0	5.2E+01	2.6E+02	5.1E+02	2.0E-01	1.0E-01

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values.
Shaded cells indicated HQs equal to or greater than 1.0.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

Table 7-33
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Off-Site Areas (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs																(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.8E+01	6.5E+01	2.9E-02	8.0E-03
1,2-Dichlorobenzene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+02	1.4E+03	5.0E-03	3.6E-04
1,3-Dichlorobenzene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+02	1.4E+03	5.0E-03	3.6E-04
1,4-Dichlorobenzene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+02	1.8E+02	5.0E-03	2.8E-03
2,2'-Oxybis(1-Chloropropane)	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
2,4,5-Trichlorophenol	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.2E+01	3.6E+01	4.3E-02	1.4E-02
2,4,6-Trichlorophenol	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	6.0E+02	3.6E+01	8.5E-04	1.4E-02
2,4-Dichlorophenol	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.6E-01	3.6E+00	1.4E+00	1.4E-01
2,4-Dinitrophenol	***1.1E+00***	0.0012	1.0	8.2E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	1.6E-03	1.6E-02	1.6E+03	1.6E+02
2,4-Dinitrotoluene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.0E-01	2.2E+00	1.7E+00	2.3E-01
2,6-Dinitrotoluene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	8.5E-01	8.5E+00	6.1E-01	6.1E-02
2-Chloronaphthalene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	2.6E+01	6.3E+01	2.0E-02	8.2E-03
2-Chlorophenol	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	6.0E+01	6.0E+00	8.5E-03	8.5E-02
2-Methylnaphthalene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.0E+03	3.0E+04	1.7E-04	1.7E-05
2-Methylphenol (o-Cresol)	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	2.8E+02	2.8E+03	1.8E-03	1.8E-04
2-Nitroaniline	***1.1E+00***	0.0012	1.0	8.2E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
2-Nitrophenol	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.0E+00	8.5E+00	1.7E-01	6.1E-02
3,3'-Dichlorobenzidine	***4.0E-01***	0.0012	1.0	3.1E-02	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.0E+00	1.6E+01	5.3E+02	6.6E-02	1.9E-03
3/4-Methylphenol (m&p-Cresol)	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	2.8E+02	2.8E+03	1.8E-03	1.8E-04
3-Nitroaniline	***1.1E+00***	0.0012	1.0	8.2E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
4,6-Dinitro-2-methylphenol	***1.1E+00***	0.0012	1.0	8.2E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	3.0E-01	5.5E+00	8.6E+00	4.7E-01
4-Bromophenyl Phenyl Ether	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.2E+00	9.7E+00	4.3E-01	5.3E-02
4-Chloro-3-methylphenol	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.4E+02	1.4E+03	3.8E-03	3.8E-04
4-Chloroaniline	***4.0E-01***	0.0012	1.0	3.1E-02	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.0E+00	1.5E+00	1.5E+01	6.8E-01	6.8E-02
4-Chlorophenyl Phenyl Ether	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.2E+00	9.7E+00	4.3E-01	5.3E-02
4-Nitroaniline	***1.1E+00***	0.0012	1.0	8.2E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
4-Nitrophenol	***1.1E+00***	0.0012	1.0	8.2E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	3.0E+00	8.5E+00	8.6E-01	3.1E-01
Acenaphthene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Acenaphthylene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Anthracene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+02	1.0E+03	4.9E-03	4.9E-04
Benzo(a)anthracene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(a)pyrene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(b)fluoranthene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(g,h,i)perylene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(k)fluoranthene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
bis(2-Chloroethoxy)methane	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
bis(2-Chloroethyl)ether	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
bis(2-Ethylhexyl)phthalate	3.0E-01	0.0012	1.0	2.3E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.3E+01	1.3E+02	4.1E-02	4.1E-03
Butyl Benzyl Phthalate	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.9E+01	5.7E+01	2.7E-02	9.1E-03
Carbazole	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.1E+00	3.1E+01	1.6E-01	1.6E-02
Chrysene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Dibenzo(a,h)anthracene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Dibenzofuran	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.6E-02	1.6E-01	3.2E+01	3.2E+00
Diethyl Phthalate	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	5.6E+03	5.6E+04	9.2E-05	9.2E-06
Dimethyl Phthalate	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	4.8E+03	4.8E+04	1.1E-04	1.1E-05
Di-n-butylphthalate	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	4.3E+02	1.4E+03	1.2E-03	3.6E-04
Di-n-octylphthalate	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	5.7E+02	1.9E+03	9.0E-04	2.7E-04
Fluoranthene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.3E+01	2.6E+01	4.0E-02	2.0E-02
Fluorene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.3E+01	2.6E+01	4.0E-02	2.0E-02
Hexachlorobenzene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	9.7E-02	3.5E-01	5.3E+00	1.5E+00
Hexachlorobutadiene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	2.4E-01	2.4E-01	2.1E+00	2.1E+00
Hexachlorocyclopentadiene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	7.2E-01	1.3E+00	7.1E-01	3.9E-01
Hexachloroethane	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.2E-01	1.8E+00	4.3E+00	2.8E-01
Indeno(1,2,3-cd)pyrene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Isophorone	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	2.2E+01	2.2E+02	2.3E-02	2.4E-03
Naphthalene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	8.6E+00	1.7E+01	6.0E-02	3.0E-02
Nitrobenzene	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	4.8E-02	4.8E-01	1.1E+01	1.1E+00
N-Nitroso-di-n-propylamine	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E-02	1.0E-01	4.9E+01	4.9E+00
N-Nitrosodiphenylamine	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	2.4E+02	6.0E+01	2.1E-03	8.5E-03
Pentachlorophenol	***1.0E-02***	0.0012	1.0	7.8E-04	0.0090	***1.0E-01***	1.0	0.67	4.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	4.6E-02	4.3E-01	4.3E+00	1.1E-01	1.1E-02
Phenanthrene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Phenol	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	7.2E+01	1.4E+02	7.1E-03	3.6E-03
Pyrene	***1.9E-01***	0.0012	1.0	1.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	7.8E+00	1.3E+01	6.6E-02	4.0E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-33
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Off-Site Areas (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																NOAEL	LOAEL	NOAEL HQ	LOAEL HQ
Pesticides																			
4,4'-DDD	6.6E-03	0.0012	1.0	5.1E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.5E-03	3.4E-01	1.7E+00	2.8E-02	5.5E-03
4,4'-DDE	1.6E-02	0.0012	1.0	1.2E-03	0.0090	2.1E-02	1.0	0.67	8.4E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.1E-02	3.4E-01	1.7E+00	3.1E-02	6.2E-03
4,4'-DDT	4.6E-02	0.0012	1.0	3.6E-03	0.0090	5.8E-02	1.0	0.67	2.3E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	2.8E-02	3.4E-01	1.7E+00	8.1E-02	1.6E-02
Aldrin	***1.1E-03***	0.0012	1.0	8.2E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.9E-03	0.33	3.7E-04	0.015	1.0	4.5E-03	3.1E-01	1.6E+00	1.4E-02	2.9E-03
alpha-BHC	***1.1E-03***	0.0012	1.0	8.2E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	2.5E+00	5.1E+00	1.8E-03	9.1E-04
alpha-Chlordane	***1.1E-03***	0.0012	1.0	8.2E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	5.2E+00	1.0E+01	8.9E-04	4.4E-04
beta-BHC	***1.1E-03***	0.0012	1.0	8.2E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	6.3E-01	3.2E+00	7.3E-03	1.5E-03
delta-BHC	***1.1E-03***	0.0012	1.0	8.2E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	4.4E-03	2.5E+00	5.1E+00	1.7E-03	8.7E-04
Dieldrin	9.6E-03	0.0012	1.0	7.5E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.8E-03	1.7E-02	1.7E-01	5.8E-01	5.8E-02
Endosulfan I	2.1E-03	0.0012	1.0	1.6E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.7E-03	5.9E-01	5.9E+00	7.9E-03	7.9E-04
Endosulfan II	***2.0E-03***	0.0012	1.0	1.6E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.2E-03	5.9E-01	5.9E+00	1.5E-02	1.5E-03
Endosulfan Sulfate	***1.9E-03***	0.0012	1.0	1.5E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.2E-03	5.9E-01	5.9E+00	1.5E-02	1.5E-03
Endrin	***2.0E-03***	0.0012	1.0	1.6E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.2E-03	9.4E-02	9.4E-01	9.7E-02	9.7E-03
Endrin Aldehyde	3.0E-03	0.0012	1.0	2.3E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.3E-03	9.4E-02	9.4E-01	9.8E-02	9.8E-03
Endrin Ketone	***2.0E-03***	0.0012	1.0	1.6E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	4.2E-03	0.33	8.3E-04	0.015	1.0	9.0E-03	9.4E-02	9.4E-01	9.6E-02	9.6E-03
gamma-BHC (Lindane)	***1.1E-03***	0.0012	1.0	8.2E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	4.4E-03	2.7E+01	2.7E+02	1.6E-04	1.6E-05
gamma-Chlordane	***1.1E-03***	0.0012	1.0	8.2E-05	0.0090	5.1E-03	1.0	0.67	2.1E-03	1.6E-03	0.33	3.2E-04	0.015	1.0	2.4E-03	5.2E+00	1.0E+01	4.7E-04	2.4E-04
Heptachlor	***1.1E-03***	0.0012	1.0	8.2E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.7E-03	0.33	3.4E-04	0.015	1.0	4.4E-03	7.0E-02	7.0E-01	6.4E-02	6.4E-03
Heptachlor Epoxide	2.3E-03	0.0012	1.0	1.8E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.7E-03	9.5E-04	7.0E-03	4.9E+00	6.7E-01
Methoxychlor	***1.1E-02***	0.0012	1.0	8.2E-04	0.0090	***1.0E-01***	1.0	0.67	4.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	4.6E-02	2.0E+00	4.0E+00	2.3E-02	1.2E-02
Toxaphene	***1.1E-01***	0.0012	1.0	8.2E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***2.6E-01***	0.33	5.0E-02	0.015	1.0	4.6E-01	7.9E+00	7.9E+01	5.8E-02	5.8E-03
Herbicides																			
2,4-D	5.8E-03	0.0012	1.0	4.5E-04	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	1.1E-01	0.33	2.2E-02	0.015	1.0	4.2E-02	1.9E+00	9.4E+00	2.3E-02	4.5E-03
2,4-DB	***5.0E-03***	0.0012	1.0	3.9E-04	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	2.0E-02	0.33	4.0E-03	0.015	1.0	2.4E-02	3.1E+00	9.6E+00	8.0E-03	2.6E-03
2,4,5-T	***5.0E-03***	0.0012	1.0	3.9E-04	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	2.3E-02	3.6E+00	1.2E+01	6.3E-03	1.9E-03
2,4,5-TP (Silvex)	***5.0E-03***	0.0012	1.0	3.9E-04	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	2.3E-02	1.1E+00	3.7E+00	2.0E-02	6.1E-03
Dalapon	***1.2E+00***	0.0012	1.0	9.4E-02	0.0090	***1.2E+01***	1.0	0.67	4.8E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	5.5E+00	1.0E+01	3.5E+01	5.4E-01	1.6E-01
Dicamba	***1.2E-02***	0.0012	1.0	9.4E-04	0.0090	***1.2E-01***	1.0	0.67	4.8E-02	***3.0E-02***	0.33	5.9E-03	0.015	1.0	5.5E-02	3.9E+00	1.3E+01	1.4E-02	4.2E-03
Dichlorprop	1.6E-01	0.0012	1.0	1.2E-02	0.0090	***6.0E-01***	1.0	0.67	2.4E-01	***1.5E-01***	0.33	3.0E-02	0.015	1.0	2.8E-01	2.1E-01	2.1E+00	1.4E+00	1.4E-01
Dinoseb	***2.0E-01***	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.2E-01	1.2E+00	4.3E+00	4.3E-01
MCPA	***1.2E+00***	0.0012	1.0	9.4E-02	0.0090	7.4E+01	1.0	0.67	3.0E+01	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.0E+01	2.2E-01	1.1E+00	1.4E+02	2.7E+01
MCPP	6.6E+00	0.0012	1.0	5.1E-01	0.0090	***1.2E+01***	1.0	0.67	4.8E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	5.9E+00	3.6E-01	1.1E+00	1.6E+01	5.5E+00
PCBs																			
Total PCBs	1.7E-01	0.0012	1.0	1.4E-02	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	3.2E-02	0.33	6.2E-03	0.015	1.0	4.0E-02	1.2E-01	1.2E+00	3.3E-01	3.3E-02
Dioxins/Furans																			
TEQ	2.3E-04	0.0012	1.0	1.8E-05	0.0090	6.7E-06	1.0	0.67	2.7E-06	5.9E-07	0.33	1.2E-07	0.015	1.0	2.1E-05	1.2E-06	1.2E-05	1.7E+01	1.7E+00
Metals*																			
Aluminum	8.2E+03	0.0012	1.0	6.4E+02	0.0090	1.2E+03	1.0	0.67	4.8E+02	2.4E+01	0.33	4.8E+00	0.015	1.0	1.1E+03	2.0E+00	2.0E+01	5.6E+02	5.6E+01
Antimony	1.9E+00	0.0012	1.0	1.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***9.0E-01***	0.33	1.8E-01	0.015	1.0	7.3E-01	1.3E-01	1.3E+00	5.6E+00	5.6E-01
Arsenic	9.3E+00	0.0012	1.0	7.3E-01	0.0090	5.9E+00	1.0	0.67	2.4E+00	***4.5E-01***	0.33	8.8E-02	0.015	1.0	3.2E+00	1.4E-01	1.4E+00	2.3E+01	2.3E+00
Barium	2.0E+02	0.0012	1.0	1.6E+01	0.0090	3.3E+01	1.0	0.67	1.3E+01	2.2E+00	0.33	4.3E-01	0.015	1.0	2.9E+01	1.1E+01	4.4E+01	2.6E+00	6.6E-01
Beryllium	6.0E-01	0.0012	1.0	4.7E-02	0.0090	***2.0E-01***	1.0	0.67	8.0E-02	***1.8E-01***	0.33	3.5E-02	0.015	1.0	1.6E-01	8.0E-01	8.0E+00	2.0E-01	2.0E-02
Cadmium	4.5E+00	0.0012	1.0	3.5E-01	0.0090	2.1E+00	1.0	0.67	8.4E-01	7.2E-01	0.33	1.4E-01	0.015	1.0	1.3E+00	5.8E+00	5.8E+01	2.3E-01	2.3E-02
Chromium	1.3E+01	0.0012	1.0	1.0E+00	0.0090	2.3E+00	1.0	0.67	9.2E-01	1.9E-01	0.33	3.8E-02	0.015	1.0	2.0E+00	4.0E+00	1.6E+01	5.0E-01	1.2E-01
Cobalt	6.6E+00	0.0012	1.0	5.1E-01	0.0090	1.9E+00	1.0	0.67	7.6E-01	***4.5E-01***	0.33	8.8E-02	0.015	1.0	1.4E+00	6.0E-02	6.0E-01	2.3E+01	2.3E+00
Copper	1.5E+02	0.0012	1.0	1.2E+01	0.0090	3.0E+01	1.0	0.67	1.2E+01	2.2E+01	0.33	4.4E+00	0.015	1.0	2.8E+01	1.5E+01	2.0E+01	1.9E+00	1.4E+00
Lead	1.3E+02	0.0012	1.0	1.0E+01	0.0090	2.3E+01	1.0	0.67	9.2E+00	1.0E+00	0.33	2.0E-01	0.015	1.0	2.0E+01	9.7E+00	9.7E+01	2.0E+00	2.0E-01
Manganese	4.1E+02	0.0012	1.0	3.2E+01	0.0090	6.0E+01	1.0	0.67	2.4E+01	1.1E+01	0.33	2.1E+00	0.015	1.0	5.8E+01	1.1E+02	3.4E+02	5.5E-01	1.7E-01
Mercury	1.1E-01	0.0012	1.0	8.6E-03	0.0090	9.6E-02	1.0	0.67	3.9E-02	1.5E-01	0.33	3.0E-02	0.015	1.0	7.7E-02	9.9E-02	4.9E-01	7.8E-01	1.6E-01
Nickel	2.7E+01	0.0012	1.0	2.1E+00	0.0090	4.7E+00	1.0	0.67	1.9E+00	***1.8E+00***	0.33	3.5E-01	0.015	1.0	4.3E+00	4.8E+01	9.7E+01	9.0E-02	4.5E-02
Selenium	6.2E-01	0.0012	1.0	4.8E-02	0.0090	5.3E-01	1.0	0.67	2.1E-01	***6.6E-01***	0.33	1.3E-01	0.015	1.0	3.9E-01	1.9E-01	3.2E-01	2.0E+00	1.2E+00
Silver	6.7E-01	0.0012	1.0	5.2E-02	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	4.9E-01	0.33	9.6E-02	0.015	1.0	3.5E-01	1.9E-01	1.9E+00	1.9E+00	1.9E-01
Thallium	***5.5E-01***	0.0012	1.0	4.3E-02	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***4.5E-01***	0.33	8.8E-02	0.015	1.0	3.3E-01	1.4E-02	1.4E-01	2.5E+01	2.5E+00
Vanadium	2.5E+01	0.0012	1.0	2.0E+00	0.0090	3.9E+00	1.0	0.67	1.6E+00	***4.5E-01***	0.33	8.8E-02	0.015	1.0	3.6E+00	1.1E-01	1.1E+00	3.2E+01	3.2E+00
Zinc	4.4E+02	0.0012	1.0	3.4E+01	0.0090	8.6E+01	1.0	0.67	3.5E+01	6.2E+01	0.33	1.2E+01	0.015	1.0	8.1E+01	2.6E+02	5.1E+02	3.2E-01	1.6E-01

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

Table 7-34
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site P (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
SVOCs																			
1,2,4-Trichlorobenzene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.8E+01	6.5E+01	2.6E-02	7.2E-03
1,2-Dichlorobenzene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.0E+02	1.4E+03	4.5E-03	3.2E-04
1,3-Dichlorobenzene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.0E+02	1.4E+03	4.5E-03	3.2E-04
1,4-Dichlorobenzene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.0E+02	1.8E+02	4.5E-03	2.6E-03
2,2'-Oxybis(1-Chloropropane)	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	3.7E+01	2.1E+02	1.3E-02	2.3E-03
2,4,5-Trichlorophenol	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.2E+01	3.6E+01	3.9E-02	1.3E-02
2,4,6-Trichlorophenol	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	6.0E+02	3.6E+01	7.7E-04	1.3E-02
2,4-Dichlorophenol	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	3.6E-01	3.6E+00	1.3E+00	1.3E-01
2,4-Dinitrophenol	***5.2E+00***	0.0012	1.0	4.1E-01	0.0090	***3.8E+00***	1.0	0.67	1.5E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.4E+00	1.6E-03	1.6E-02	1.5E+03	1.5E+02
2,4-Dinitrotoluene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	3.0E-01	2.2E+00	1.6E+00	2.1E-01
2,6-Dinitrotoluene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	8.5E-01	8.5E+00	5.5E-01	5.5E-02
2-Chloronaphthalene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	2.6E+01	6.3E+01	1.8E-02	7.5E-03
2-Chlorophenol	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	6.0E+01	6.0E+00	7.7E-03	7.7E-02
2-Methylnaphthalene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	3.0E+03	3.0E+04	1.6E-04	1.6E-05
2-Methylphenol (o-Cresol)	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	2.8E+02	2.8E+03	1.7E-03	1.7E-04
2-Nitroaniline	***4.6E+00***	0.0012	1.0	3.6E-01	0.0090	***3.8E+00***	1.0	0.67	1.5E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.4E+00	5.1E+00	5.1E+01	4.7E-01	4.7E-02
2-Nitrophenol	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	3.0E+00	8.5E+00	1.5E-01	5.5E-02
3,3'-Dichlorobenzidine	***1.8E+00***	0.0012	1.0	1.4E-01	0.0090	***1.5E+00***	1.0	0.67	6.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	9.4E-01	1.6E+01	5.3E+02	6.0E-02	1.8E-03
3/4-Methylphenol (m&p-Cresol)	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	2.8E+02	2.8E+03	1.7E-03	1.7E-04
3-Nitroaniline	***4.6E+00***	0.0012	1.0	3.6E-01	0.0090	***3.8E+00***	1.0	0.67	1.5E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.4E+00	5.1E+00	5.1E+01	4.7E-01	4.7E-02
4,6-Dinitro-2-methylphenol	***4.6E+00***	0.0012	1.0	3.6E-01	0.0090	***3.8E+00***	1.0	0.67	1.5E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.4E+00	3.0E-01	5.5E+00	7.9E+00	4.3E-01
4-Bromophenyl Phenyl Ether	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.2E+00	9.7E+00	3.9E-01	4.8E-02
4-Chloro-3-methylphenol	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.4E+02	1.4E+03	3.5E-03	3.5E-04
4-Chloroaniline	2.8E+00	0.0012	1.0	2.2E-01	0.0090	***1.5E+00***	1.0	0.67	6.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.0E+00	1.5E+00	1.5E+01	6.7E-01	6.7E-02
4-Chlorophenyl Phenyl Ether	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.2E+00	9.7E+00	3.9E-01	4.8E-02
4-Nitroaniline	***4.6E+00***	0.0012	1.0	3.6E-01	0.0090	***3.8E+00***	1.0	0.67	1.5E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.4E+00	5.1E+00	5.1E+01	4.7E-01	4.7E-02
4-Nitrophenol	***4.6E+00***	0.0012	1.0	3.6E-01	0.0090	***3.8E+00***	1.0	0.67	1.5E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.4E+00	3.0E+00	8.5E+00	7.9E-01	2.8E-01
Acenaphthene	8.7E-01	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.8E+01	3.6E+01	2.6E-02	1.3E-02
Acenaphthylene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.8E+01	3.6E+01	2.6E-02	1.3E-02
Anthracene	8.7E-01	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.0E+02	1.0E+03	4.5E-03	4.5E-04
Benzo(a)anthracene	9.0E-01	0.0012	1.0	7.0E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.0E+00	1.0E+01	4.5E-01	4.5E-02
Benzo(a)pyrene	9.1E-01	0.0012	1.0	7.1E-02	0.0090	6.8E-01	1.0	0.67	2.7E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.4E-01	1.0E+00	1.0E+01	4.2E-01	4.2E-02
Benzo(b)fluoranthene	9.2E-01	0.0012	1.0	7.2E-02	0.0090	6.8E-01	1.0	0.67	2.7E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.4E-01	1.0E+00	1.0E+01	4.3E-01	4.3E-02
Benzo(g,h,i)perylene	8.7E-01	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.0E+00	1.0E+01	4.5E-01	4.5E-02
Benzo(k)fluoranthene	9.0E-01	0.0012	1.0	7.1E-02	0.0090	6.8E-01	1.0	0.67	2.7E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.4E-01	1.0E+00	1.0E+01	4.3E-01	4.3E-02
bis(2-Chloroethoxy)methane	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	3.7E+01	2.1E+02	1.3E-02	2.3E-03
bis(2-Chloroethyl)ether	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	3.7E+01	2.1E+02	1.3E-02	2.3E-03
bis(2-Ethylhexyl)phthalate	9.4E-01	0.0012	1.0	7.4E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.3E+01	1.3E+02	3.7E-02	3.7E-03
Butyl Benzyl Phthalate	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.9E+01	5.7E+01	2.4E-02	8.2E-03
Carbazole	8.7E-01	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	3.1E+00	3.1E+01	1.5E-01	1.5E-02
Chrysene	9.1E-01	0.0012	1.0	7.1E-02	0.0090	6.5E-01	1.0	0.67	2.6E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.3E-01	1.0E+00	1.0E+01	4.1E-01	4.1E-02
Dibenzo(a,h)anthracene	8.6E-01	0.0012	1.0	6.7E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.0E+00	1.0E+01	4.5E-01	4.5E-02
Dibenzofuran	8.6E-01	0.0012	1.0	6.7E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.6E-02	1.6E-01	2.9E+01	2.9E+00
Diethyl Phthalate	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	5.6E+03	5.6E+04	8.4E-05	8.4E-06
Dimethyl Phthalate	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	4.8E+03	4.8E+04	9.8E-05	9.8E-06
Di-n-butylphthalate	8.6E-01	0.0012	1.0	6.7E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	4.3E+02	1.4E+03	1.1E-03	3.2E-04
Di-n-octylphthalate	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	5.7E+02	1.9E+03	8.1E-04	2.4E-04
Fluoranthene	1.1E+00	0.0012	1.0	8.4E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.8E-01	1.3E+01	2.6E+01	3.7E-02	1.9E-02
Fluorene	8.7E-01	0.0012	1.0	6.7E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.3E+01	2.6E+01	3.6E-02	1.8E-02
Hexachlorobenzene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	9.7E-02	3.5E-01	4.8E+00	1.3E+00
Hexachlorobutadiene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	2.4E-01	2.4E-01	1.9E+00	1.9E+00
Hexachlorocyclopentadiene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	7.2E-01	1.3E+00	6.4E-01	3.5E-01
Hexachloroethane	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.2E-01	1.8E+00	3.9E+00	2.6E-01
Indeno(1,2,3-cd)pyrene	8.5E-01	0.0012	1.0	6.7E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.0E+00	1.0E+01	4.5E-01	4.5E-02
Isophorone	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	2.2E+01	2.2E+02	2.1E-02	2.2E-03
Naphthalene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	8.6E+00	1.7E+01	5.4E-02	2.7E-02
Nitrobenzene	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	4.8E-02	4.8E-01	9.7E+00	9.7E-01
N-Nitroso-di-n-propylamine	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.0E-02	1.0E-01	4.5E+01	4.5E+00
N-Nitrosodiphenylamine	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	2.4E+02	6.0E+01	1.9E-03	7.7E-03
Pentachlorophenol	1.4E-01	0.0012	1.0	1.1E-02	0.0090	2.2E-02	1.0	0.67	8.9E-03	***2.6E-02***	0.33	5.0E-03	0.015	1.0	2.5E-02	4.3E-01	4.3E+00	5.9E-02	5.9E-03
Phenanthrene	9.4E-01	0.0012	1.0	7.3E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.8E+01	3.6E+01	2.6E-02	1.3E-02
Phenol	8.9E-01	0.0012	1.0	6.9E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	7.2E+01	1.4E+02	6.5E-03	3.2E-03
Pyrene	8.9E-01	0.0012	1.0	7.0E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	7.8E+00	1.3E+01	6.0E-02	3.6E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-34
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site P (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																NOAEL	LOAEL	NOAEL HQ	LOAEL HQ
Pesticides																			
4,4'-DDD	***2.5E-02***	0.0012	1.0	1.9E-03	0.0090	***1.5E-02***	1.0	0.67	6.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	8.9E-03	3.4E-01	1.7E+00	2.6E-02	5.2E-03
4,4'-DDE	2.5E-02	0.0012	1.0	1.9E-03	0.0090	1.1E-02	1.0	0.67	4.4E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	7.3E-03	3.4E-01	1.7E+00	2.1E-02	4.2E-03
4,4'-DDT	2.8E-01	0.0012	1.0	2.2E-02	0.0090	6.2E-02	1.0	0.67	2.5E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	4.8E-02	3.4E-01	1.7E+00	1.4E-01	2.8E-02
Aldrin	***1.3E-02***	0.0012	1.0	1.0E-03	0.0090	***7.5E-03***	1.0	0.67	3.0E-03	1.9E-03	0.33	3.7E-04	0.015	1.0	4.4E-03	3.1E-01	1.6E+00	1.4E-02	2.8E-03
alpha-BHC	***1.3E-02***	0.0012	1.0	1.0E-03	0.0090	***7.5E-03***	1.0	0.67	3.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.5E-03	2.5E+00	5.1E+00	1.8E-03	8.9E-04
alpha-Chlordane	1.3E-02	0.0012	1.0	9.8E-04	0.0090	***7.5E-03***	1.0	0.67	3.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.5E-03	5.2E+00	1.0E+01	8.7E-04	4.3E-04
beta-BHC	***1.3E-02***	0.0012	1.0	1.0E-03	0.0090	***7.5E-03***	1.0	0.67	3.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.5E-03	6.3E-01	3.2E+00	7.1E-03	1.4E-03
delta-BHC	***1.3E-02***	0.0012	1.0	1.0E-03	0.0090	5.8E-03	1.0	0.67	2.3E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	3.6E-03	2.5E+00	5.1E+00	1.4E-03	7.2E-04
Dieldrin	2.1E-02	0.0012	1.0	1.6E-03	0.0090	2.1E-02	1.0	0.67	8.4E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.1E-02	1.7E-02	1.7E-01	6.6E-01	6.6E-02
Endosulfan I	***1.3E-02***	0.0012	1.0	1.0E-03	0.0090	***7.5E-03***	1.0	0.67	3.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.5E-03	5.9E-01	5.9E+00	7.6E-03	7.6E-04
Endosulfan II	***2.5E-02***	0.0012	1.0	1.9E-03	0.0090	***1.5E-02***	1.0	0.67	6.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	8.9E-03	5.9E-01	5.9E+00	1.5E-02	1.5E-03
Endosulfan Sulfate	2.4E-02	0.0012	1.0	1.9E-03	0.0090	1.1E-02	1.0	0.67	4.4E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	7.3E-03	5.9E-01	5.9E+00	1.2E-02	1.2E-03
Endrin	***2.5E-02***	0.0012	1.0	1.9E-03	0.0090	1.7E-02	1.0	0.67	6.7E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.6E-03	9.4E-02	9.4E-01	1.0E-01	1.0E-02
Endrin Aldehyde	5.0E-02	0.0012	1.0	3.9E-03	0.0090	***1.5E-02***	1.0	0.67	6.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.1E-02	9.4E-02	9.4E-01	1.2E-01	1.2E-02
Endrin Ketone	1.8E-02	0.0012	1.0	1.4E-03	0.0090	1.2E-02	1.0	0.67	4.8E-03	4.2E-03	0.33	8.3E-04	0.015	1.0	7.0E-03	9.4E-02	9.4E-01	7.5E-02	7.5E-03
gamma-BHC (Lindane)	***1.3E-02***	0.0012	1.0	1.0E-03	0.0090	***7.5E-03***	1.0	0.67	3.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	4.3E-03	2.7E+01	2.7E+02	1.6E-04	1.6E-05
gamma-Chlordane	***1.3E-02***	0.0012	1.0	1.0E-03	0.0090	***7.5E-03***	1.0	0.67	3.0E-03	1.6E-03	0.33	3.2E-04	0.015	1.0	4.3E-03	5.2E+00	1.0E+01	8.4E-04	4.2E-04
Heptachlor	***1.3E-02***	0.0012	1.0	1.0E-03	0.0090	6.4E-03	1.0	0.67	2.6E-03	1.7E-03	0.33	3.4E-04	0.015	1.0	3.9E-03	7.0E-02	7.0E-01	5.6E-02	5.6E-03
Heptachlor Epoxide	1.2E-02	0.0012	1.0	9.1E-04	0.0090	7.0E-03	1.0	0.67	2.8E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.2E-03	9.5E-04	7.0E-03	4.4E+00	6.0E-01
Methoxychlor	***1.3E-01***	0.0012	1.0	1.0E-02	0.0090	2.3E-02	1.0	0.67	9.3E-03	***2.6E-02***	0.33	5.0E-03	0.015	1.0	2.4E-02	2.0E+00	4.0E+00	1.2E-02	6.2E-03
Toxaphene	***1.3E+00***	0.0012	1.0	1.0E-01	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***2.6E-01***	0.33	5.0E-02	0.015	1.0	4.5E-01	7.9E+00	7.9E+01	5.7E-02	5.7E-03
Herbicides																			
2,4-D	9.0E-03	0.0012	1.0	7.0E-04	0.0090	2.1E-01	1.0	0.67	8.3E-02	1.1E-01	0.33	2.2E-02	0.015	1.0	1.1E-01	1.9E+00	9.4E+00	5.6E-02	1.1E-02
2,4-DB	***8.6E-03***	0.0012	1.0	6.7E-04	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	2.0E-02	0.33	4.0E-03	0.015	1.0	1.5E-02	3.1E+00	9.6E+00	4.8E-03	1.5E-03
2,4,5-T	8.3E-03	0.0012	1.0	6.5E-04	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	1.3E-02	3.6E+00	1.2E+01	3.6E-03	1.1E-03
2,4,5-TP (Silvex)	***8.6E-03***	0.0012	1.0	6.7E-04	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	1.3E-02	1.1E+00	3.7E+00	1.2E-02	3.5E-03
Dalapon	***6.7E-01***	0.0012	1.0	5.2E-02	0.0090	***6.0E+00***	1.0	0.67	2.4E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.1E+00	1.0E+01	3.5E+01	3.0E-01	8.8E-02
Dicamba	***1.1E-02***	0.0012	1.0	8.5E-04	0.0090	***6.0E-02***	1.0	0.67	2.4E-02	***3.0E-02***	0.33	5.9E-03	0.015	1.0	3.1E-02	3.9E+00	1.3E+01	7.9E-03	2.4E-03
Dichlorprop	9.2E-02	0.0012	1.0	7.2E-03	0.0090	2.6E-01	1.0	0.67	1.0E-01	***1.5E-01***	0.33	3.0E-02	0.015	1.0	1.4E-01	2.1E-01	2.1E+00	6.7E-01	6.7E-02
Dinoseb	***8.8E-01***	0.0012	1.0	6.8E-02	0.0090	***7.5E-01***	1.0	0.67	3.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.2E-01	1.2E+00	3.9E+00	3.9E-01
MCPA	***2.1E+00***	0.0012	1.0	1.6E-01	0.0090	5.9E+01	1.0	0.67	2.4E+01	***3.0E+00***	0.33	5.9E-01	0.015	1.0	2.5E+01	2.2E-01	1.1E+00	1.1E+02	2.2E+01
MCPP	2.4E+00	0.0012	1.0	1.9E-01	0.0090	***6.0E+00***	1.0	0.67	2.4E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.2E+00	3.6E-01	1.1E+00	8.8E+00	2.9E+00
PCBs																			
Total PCBs	1.8E+00	0.0012	1.0	1.4E-01	0.0090	6.4E-02	1.0	0.67	2.6E-02	***2.5E-02***	0.33	5.0E-03	0.015	1.0	1.7E-01	1.2E-01	1.2E+00	1.4E+00	1.4E-01
Dioxins/Furans																			
TEQ	3.5E-04	0.0012	1.0	2.7E-05	0.0090	1.3E-05	1.0	0.67	5.4E-06	3.4E-06	0.33	6.8E-07	0.015	1.0	3.3E-05	1.2E-06	1.2E-05	2.8E+01	2.8E+00
Metals*																			
Aluminum	5.6E+03	0.0012	1.0	4.4E+02	0.0090	8.6E+02	1.0	0.67	3.5E+02	1.6E+01	0.33	3.2E+00	0.015	1.0	7.9E+02	2.0E+00	2.0E+01	3.9E+02	3.9E+01
Antimony	1.0E+00	0.0012	1.0	7.8E-02	0.0090	7.2E-01	1.0	0.67	2.9E-01	***9.0E-01***	0.33	1.8E-01	0.015	1.0	5.5E-01	1.3E-01	1.3E+00	4.2E+00	4.2E-01
Arsenic	1.1E+01	0.0012	1.0	8.5E-01	0.0090	8.6E+00	1.0	0.67	3.4E+00	***4.6E-01***	0.33	9.0E-02	0.015	1.0	4.4E+00	1.4E-01	1.4E+00	3.2E+01	3.2E+00
Barium	1.7E+02	0.0012	1.0	1.3E+01	0.0090	1.9E+01	1.0	0.67	7.5E+00	1.8E+00	0.33	3.6E-01	0.015	1.0	2.1E+01	1.1E+01	4.4E+01	1.9E+00	4.8E-01
Beryllium	8.9E-01	0.0012	1.0	6.9E-02	0.0090	2.9E-01	1.0	0.67	1.2E-01	***1.8E-01***	0.33	3.6E-02	0.015	1.0	2.2E-01	8.0E-01	8.0E+00	2.8E-01	2.8E-02
Cadmium	4.4E+00	0.0012	1.0	3.4E-01	0.0090	1.3E+00	1.0	0.67	5.3E-01	8.1E-01	0.33	1.6E-01	0.015	1.0	1.0E+00	5.8E+00	5.8E+01	1.8E-01	1.8E-02
Chromium	2.3E+01	0.0012	1.0	1.8E+00	0.0090	4.1E+00	1.0	0.67	1.7E+00	2.1E-01	0.33	4.2E-02	0.015	1.0	3.5E+00	4.0E+00	1.6E+01	8.8E-01	2.2E-01
Cobalt	7.3E+00	0.0012	1.0	5.7E-01	0.0090	3.3E+00	1.0	0.67	1.3E+00	***4.6E-01***	0.33	9.0E-02	0.015	1.0	2.0E+00	6.0E-02	6.0E-01	3.3E+01	3.3E+00
Copper	6.7E+01	0.0012	1.0	5.2E+00	0.0090	1.0E+01	1.0	0.67	4.0E+00	1.4E+01	0.33	2.8E+00	0.015	1.0	1.2E+01	1.5E+01	2.0E+01	8.0E-01	6.0E-01
Lead	2.6E+02	0.0012	1.0	2.0E+01	0.0090	1.2E+01	1.0	0.67	5.0E+00	2.0E+00	0.33	4.0E-01	0.015	1.0	2.6E+01	9.7E+00	9.7E+01	2.7E+00	2.7E-01
Manganese	4.4E+02	0.0012	1.0	3.5E+01	0.0090	4.5E+01	1.0	0.67	1.8E+01	4.5E+00	0.33	8.9E-01	0.015	1.0	5.4E+01	1.1E+02	3.4E+02	5.0E-01	1.6E-01
Mercury	8.0E-01	0.0012	1.0	6.2E-02	0.0090	4.6E-02	1.0	0.67	1.8E-02	1.8E-01	0.33	3.6E-02	0.015	1.0	1.2E-01	9.9E-02	4.9E-01	1.2E+00	2.4E-01
Nickel	3.0E+01	0.0012	1.0	2.4E+00	0.0090	7.1E+00	1.0	0.67	2.8E+00	***1.8E+00***	0.33	3.6E-01	0.015	1.0	5.6E+00	4.8E+01	9.7E+01	1.1E-01	5.7E-02
Selenium	1.9E+00	0.0012	1.0	1.4E-01	0.0090	1.0E+00	1.0	0.67	4.2E-01	***1.3E+00***	0.33	2.6E-01	0.015	1.0	8.2E-01	1.9E-01	3.2E-01	4.3E+00	2.6E+00
Silver	4.9E-01	0.0012	1.0	3.8E-02	0.0090	***4.9E-01***	1.0	0.67	2.0E-01	***4.6E-01***	0.33	9.0E-02	0.015	1.0	3.2E-01	1.9E-01	1.9E+00	1.7E+00	1.7E-01
Thallium	1.2E+00	0.0012	1.0	9.3E-02	0.0090	***4.9E-01***	1.0	0.67	2.0E-01	***4.6E-01***	0.33	9.0E-02	0.015	1.0	3.8E-01	1.4E-02	1.4E-01	2.8E+01	2.8E+00
Vanadium	4.5E+01	0.0012	1.0	3.5E+00	0.0090	7.2E+00	1.0	0.67	2.9E+00	***4.6E-01***	0.33	9.0E-02	0.015	1.0	6.4E+00	1.1E-01	1.1E+00	5.8E+01	5.8E+00
Zinc	7.3E+02	0.0012	1.0	5.7E+01	0.0090	7.3E+01	1.0	0.67	2.9E+01	8.7E+01	0.33	1.7E+01	0.015	1.0	1.0E+02	2.6E+02	5.1E+02	4.0E-01	2.0E-01

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

Table 7-35
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site P (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs																(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.8E+01	6.5E+01	4.7E-02	1.3E-02
1,2-Dichlorobenzene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E+02	1.4E+03	8.1E-03	5.8E-04
1,3-Dichlorobenzene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E+02	1.4E+03	8.1E-03	5.8E-04
1,4-Dichlorobenzene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E+02	1.8E+02	8.1E-03	4.6E-03
2,2'-Oxybis(1-Chloropropane)	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	3.7E+01	2.1E+02	2.2E-02	4.0E-03
2,4,5-Trichlorophenol	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.2E+01	3.6E+01	6.9E-02	2.3E-02
2,4,6-Trichlorophenol	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	6.0E+02	3.6E+01	1.4E-03	2.3E-02
2,4-Dichlorophenol	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	3.6E-01	3.6E+00	2.3E+00	2.3E-01
2,4-Dinitrophenol	***2.2E+01***	0.0012	1.0	1.7E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	4.2E+00	1.6E-03	1.6E-02	2.6E+03	2.6E+02
2,4-Dinitrotoluene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	3.0E-01	2.2E+00	2.8E+00	3.7E-01
2,6-Dinitrotoluene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	8.5E-01	8.5E+00	9.9E-01	9.9E-02
2-Chloronaphthalene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	2.6E+01	6.3E+01	3.2E-02	1.3E-02
2-Chlorophenol	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	6.0E+01	6.0E+00	1.4E-02	1.4E-01
2-Methylnaphthalene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	3.0E+03	3.0E+04	2.8E-04	2.8E-05
2-Methylphenol (o-Cresol)	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	2.8E+02	2.8E+03	3.0E-03	3.0E-04
2-Nitroaniline	***2.2E+01***	0.0012	1.0	1.7E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	4.2E+00	5.1E+00	5.1E+01	8.3E-01	8.3E-02
2-Nitrophenol	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	3.0E+00	8.5E+00	2.8E-01	9.9E-02
3,3'-Dichlorobenzidine	***8.5E+00***	0.0012	1.0	6.6E-01	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.7E+00	1.6E+01	5.3E+02	1.1E-01	3.1E-03
3/4-Methylphenol (m&p-Cresol)	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	2.8E+02	2.8E+03	3.0E-03	3.0E-04
3-Nitroaniline	***2.2E+01***	0.0012	1.0	1.7E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	4.2E+00	5.1E+00	5.1E+01	8.3E-01	8.3E-02
4,6-Dinitro-2-methylphenol	***2.2E+01***	0.0012	1.0	1.7E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	4.2E+00	3.0E-01	5.5E+00	1.4E+01	7.7E-01
4-Bromophenyl Phenyl Ether	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.2E+00	9.7E+00	6.9E-01	8.6E-02
4-Chloro-3-methylphenol	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.4E+02	1.4E+03	6.2E-03	6.2E-04
4-Chloroaniline	***2.1E+01***	0.0012	1.0	1.6E+00	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	2.6E+00	1.5E+00	1.5E+01	1.7E+00	1.7E-01
4-Chlorophenyl Phenyl Ether	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.2E+00	9.7E+00	6.9E-01	8.6E-02
4-Nitroaniline	***2.2E+01***	0.0012	1.0	1.7E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	4.2E+00	5.1E+00	5.1E+01	8.3E-01	8.3E-02
4-Nitrophenol	***2.2E+01***	0.0012	1.0	1.7E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	4.2E+00	3.0E+00	8.5E+00	1.4E+00	5.0E-01
Acenaphthene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.8E+01	3.6E+01	4.6E-02	2.3E-02
Acenaphthylene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.8E+01	3.6E+01	4.6E-02	2.3E-02
Anthracene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E+02	1.0E+03	8.0E-03	8.0E-04
Benzo(a)anthracene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E+00	1.0E+01	8.0E-01	8.0E-02
Benzo(a)pyrene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E+00	1.0E+01	8.0E-01	8.0E-02
Benzo(b)fluoranthene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E+00	1.0E+01	8.0E-01	8.0E-02
Benzo(g,h,i)perylene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E+00	1.0E+01	8.0E-01	8.0E-02
Benzo(k)fluoranthene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E+00	1.0E+01	8.0E-01	8.0E-02
bis(2-Chloroethoxy)methane	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	3.7E+01	2.1E+02	2.2E-02	4.0E-03
bis(2-Chloroethyl)ether	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	3.7E+01	2.1E+02	2.2E-02	4.0E-03
bis(2-Ethylhexyl)phthalate	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.3E+01	1.3E+02	6.6E-02	6.6E-03
Butyl Benzyl Phthalate	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.9E+01	5.7E+01	4.3E-02	1.5E-02
Carbazole	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	3.1E+00	3.1E+01	2.7E-01	2.7E-02
Chrysene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E+00	1.0E+01	8.0E-01	8.0E-02
Dibenzo(a,h)anthracene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E+00	1.0E+01	8.0E-01	8.0E-02
Dibenzofuran	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.6E-02	1.6E-01	5.3E+01	5.3E+00
Diethyl Phthalate	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	5.6E+03	5.6E+04	1.5E-04	1.5E-05
Dimethyl Phthalate	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	4.8E+03	4.8E+04	1.7E-04	1.7E-05
Di-n-butylphthalate	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	4.3E+02	1.4E+03	1.9E-03	5.8E-04
Di-n-octylphthalate	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	5.7E+02	1.9E+03	1.5E-03	4.4E-04
Fluoranthene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.3E+01	2.6E+01	6.4E-02	3.2E-02
Fluorene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.3E+01	2.6E+01	6.4E-02	3.2E-02
Hexachlorobenzene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	9.7E-02	3.5E-01	8.6E+00	2.4E+00
Hexachlorobutadiene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	2.4E-01	2.4E-01	3.5E+00	3.5E+00
Hexachlorocyclopentadiene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	7.2E-01	1.3E+00	1.2E+00	6.3E-01
Hexachloroethane	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.2E-01	1.8E+00	6.9E+00	4.6E-01
Indeno(1,2,3-cd)pyrene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E+00	1.0E+01	8.0E-01	8.0E-02
Isophorone	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	2.2E+01	2.2E+02	3.7E-02	3.9E-03
Naphthalene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	8.6E+00	1.7E+01	9.7E-02	4.9E-02
Nitrobenzene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	4.8E-02	4.8E-01	1.7E+01	1.7E+00
N-Nitroso-di-n-propylamine	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.0E-02	1.0E-01	8.0E+01	8.0E+00
N-Nitrosodiphenylamine	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	2.4E+02	6.0E+01	3.5E-03	1.4E-02
Pentachlorophenol	7.9E-01	0.0012	1.0	6.2E-02	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	8.7E-02	4.3E-01	4.3E+00	2.0E-01	2.0E-02
Phenanthrene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.8E+01	3.6E+01	4.6E-02	2.3E-02
Phenol	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	7.2E+01	1.4E+02	1.2E-02	5.8E-03
Pyrene	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	7.8E+00	1.3E+01	1.1E-01	6.4E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-35
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site P (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																NOAEL	LOAEL	NOAEL HQ	LOAEL HQ
Pesticides																			
4,4'-DDD	***4.1E-02***	0.0012	1.0	3.2E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.2E-02	3.4E-01	1.7E+00	3.5E-02	7.1E-03
4,4'-DDE	***4.1E-02***	0.0012	1.0	3.2E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.2E-02	3.4E-01	1.7E+00	3.5E-02	7.1E-03
4,4'-DDT	1.1E+00	0.0012	1.0	8.6E-02	0.0090	2.2E-01	1.0	0.67	8.8E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.8E-01	3.4E-01	1.7E+00	5.1E-01	1.0E-01
Aldrin	***2.1E-02***	0.0012	1.0	1.6E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.9E-03	0.33	3.7E-04	0.015	1.0	6.0E-03	3.1E-01	1.6E+00	1.9E-02	3.9E-03
alpha-BHC	***2.1E-02***	0.0012	1.0	1.6E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	6.2E-03	2.5E+00	5.1E+00	2.4E-03	1.2E-03
alpha-Chlordane	***2.1E-02***	0.0012	1.0	1.6E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	6.2E-03	5.2E+00	1.0E+01	1.2E-03	6.0E-04
beta-BHC	***2.1E-02***	0.0012	1.0	1.6E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	6.2E-03	6.3E-01	3.2E+00	9.8E-03	2.0E-03
delta-BHC	***2.1E-02***	0.0012	1.0	1.6E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	6.0E-03	2.5E+00	5.1E+00	2.4E-03	1.2E-03
Dieldrin	***4.1E-02***	0.0012	1.0	3.2E-03	0.0090	6.5E-02	1.0	0.67	2.6E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	3.0E-02	1.7E-02	1.7E-01	1.8E+00	1.8E-01
Endosulfan I	***2.1E-02***	0.0012	1.0	1.6E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	6.2E-03	5.9E-01	5.9E+00	1.0E-02	1.0E-03
Endosulfan II	***4.1E-02***	0.0012	1.0	3.2E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.2E-02	5.9E-01	5.9E+00	2.0E-02	2.0E-03
Endosulfan Sulfate	***4.1E-02***	0.0012	1.0	3.2E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.2E-02	5.9E-01	5.9E+00	2.0E-02	2.0E-03
Endrin	***4.1E-02***	0.0012	1.0	3.2E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.2E-02	9.4E-02	9.4E-01	1.3E-01	1.3E-02
Endrin Aldehyde	1.4E-01	0.0012	1.0	1.1E-02	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	2.0E-02	9.4E-02	9.4E-01	2.1E-01	2.1E-02
Endrin Ketone	***4.1E-02***	0.0012	1.0	3.2E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	4.2E-03	0.33	8.3E-04	0.015	1.0	1.2E-02	9.4E-02	9.4E-01	1.3E-01	1.3E-02
gamma-BHC (Lindane)	***2.1E-02***	0.0012	1.0	1.6E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	6.0E-03	2.7E+01	2.7E+02	2.2E-04	2.2E-05
gamma-Chlordane	***2.1E-02***	0.0012	1.0	1.6E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.6E-03	0.33	3.2E-04	0.015	1.0	6.0E-03	5.2E+00	1.0E+01	1.2E-03	5.8E-04
Heptachlor	***2.1E-02***	0.0012	1.0	1.6E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.7E-03	0.33	3.4E-04	0.015	1.0	6.0E-03	7.0E-02	7.0E-01	8.6E-02	8.6E-03
Heptachlor Epoxide	***2.1E-02***	0.0012	1.0	1.6E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	6.2E-03	9.5E-04	7.0E-03	6.5E+00	8.8E-01
Methoxychlor	***2.1E-01***	0.0012	1.0	1.6E-02	0.0090	5.0E-02	1.0	0.67	2.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	4.2E-02	2.0E+00	4.0E+00	2.1E-02	1.1E-02
Toxaphene	***2.1E+00***	0.0012	1.0	1.6E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***2.6E-01***	0.33	5.0E-02	0.015	1.0	6.2E-01	7.9E+00	7.9E+01	7.8E-02	7.8E-03
Herbicides																			
2,4-D	***4.8E-02***	0.0012	1.0	3.7E-03	0.0090	6.3E-01	1.0	0.67	2.5E-01	1.1E-01	0.33	2.2E-02	0.015	1.0	2.8E-01	1.9E+00	9.4E+00	1.5E-01	3.0E-02
2,4-DB	***4.8E-02***	0.0012	1.0	3.7E-03	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	2.0E-02	0.33	4.0E-03	0.015	1.0	1.8E-02	3.1E+00	9.6E+00	5.8E-03	1.9E-03
2,4,5-T	***4.8E-02***	0.0012	1.0	3.7E-03	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	1.6E-02	3.6E+00	1.2E+01	4.5E-03	1.3E-03
2,4,5-TP (Silvex)	***4.8E-02***	0.0012	1.0	3.7E-03	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	1.6E-02	1.1E+00	3.7E+00	1.4E-02	4.3E-03
Dalapon	***1.9E+00***	0.0012	1.0	1.5E-01	0.0090	***6.0E+00***	1.0	0.67	2.4E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.2E+00	1.0E+01	3.5E+01	3.1E-01	9.1E-02
Dicamba	***4.8E-02***	0.0012	1.0	3.7E-03	0.0090	***6.0E-02***	1.0	0.67	2.4E-02	***3.0E-02***	0.33	5.9E-03	0.015	1.0	3.4E-02	3.9E+00	1.3E+01	8.7E-03	2.6E-03
Dichlorprop	***6.0E-01***	0.0012	1.0	4.7E-02	0.0090	***3.0E-01***	1.0	0.67	1.2E-01	***1.5E-01***	0.33	3.0E-02	0.015	1.0	2.0E-01	2.1E-01	2.1E+00	9.5E-01	9.5E-02
Dinoseb	***4.3E+00***	0.0012	1.0	3.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.4E-01	1.2E-01	1.2E+00	6.9E+00	6.9E-01
MCPA	***1.2E+01***	0.0012	1.0	9.0E-01	0.0090	9.0E+01	1.0	0.67	3.6E+01	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.8E+01	2.2E-01	1.1E+00	1.7E+02	3.4E+01
MCPP	***1.2E+01***	0.0012	1.0	9.0E-01	0.0090	***6.0E+00***	1.0	0.67	2.4E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.9E+00	3.6E-01	1.1E+00	1.1E+01	3.6E+00
PCBs																			
Total PCBs	7.0E+00	0.0012	1.0	5.5E-01	0.0090	1.7E-01	1.0	0.67	6.8E-02	***2.5E-02***	0.33	5.0E-03	0.015	1.0	6.2E-01	1.2E-01	1.2E+00	5.1E+00	5.1E-01
Dioxins/Furans																			
TEQ	7.2E-04	0.0012	1.0	5.6E-05	0.0090	4.4E-05	1.0	0.67	1.8E-05	3.4E-06	0.33	6.8E-07	0.015	1.0	7.5E-05	1.2E-06	1.2E-05	6.2E+01	6.2E+00
Metals*																			
Aluminum	8.7E+03	0.0012	1.0	6.8E+02	0.0090	1.6E+03	1.0	0.67	6.4E+02	1.6E+01	0.33	3.2E+00	0.015	1.0	1.3E+03	2.0E+00	2.0E+01	6.6E+02	6.6E+01
Antimony	1.6E+00	0.0012	1.0	1.2E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***9.0E-01***	0.33	1.8E-01	0.015	1.0	7.1E-01	1.3E-01	1.3E+00	5.4E+00	5.4E-01
Arsenic	2.6E+01	0.0012	1.0	2.0E+00	0.0090	1.2E+01	1.0	0.67	4.8E+00	***4.6E-01***	0.33	9.0E-02	0.015	1.0	6.9E+00	1.4E-01	1.4E+00	5.0E+01	5.0E+00
Barium	7.2E+02	0.0012	1.0	5.6E+01	0.0090	3.3E+01	1.0	0.67	1.3E+01	1.8E+00	0.33	3.6E-01	0.015	1.0	7.0E+01	1.1E+01	4.4E+01	6.1E+00	1.6E+00
Beryllium	1.8E+00	0.0012	1.0	1.4E-01	0.0090	4.7E-01	1.0	0.67	1.9E-01	***1.8E-01***	0.33	3.6E-02	0.015	1.0	3.6E-01	8.0E-01	8.0E+00	4.6E-01	4.6E-02
Cadmium	2.5E+01	0.0012	1.0	2.0E+00	0.0090	1.4E+00	1.0	0.67	5.6E-01	8.1E-01	0.33	1.6E-01	0.015	1.0	2.7E+00	5.8E+00	5.8E+01	4.6E-01	4.6E-02
Chromium	1.0E+02	0.0012	1.0	7.8E+00	0.0090	1.1E+01	1.0	0.67	4.4E+00	2.1E-01	0.33	4.2E-02	0.015	1.0	1.2E+01	4.0E+00	1.6E+01	3.1E+00	7.7E-01
Cobalt	1.3E+01	0.0012	1.0	1.0E+00	0.0090	5.9E+00	1.0	0.67	2.4E+00	***4.6E-01***	0.33	9.0E-02	0.015	1.0	3.5E+00	6.0E-02	6.0E-01	5.8E+01	5.8E+00
Copper	2.5E+02	0.0012	1.0	2.0E+01	0.0090	1.4E+01	1.0	0.67	5.6E+00	1.4E+01	0.33	2.8E+00	0.015	1.0	2.8E+01	1.5E+01	2.0E+01	1.9E+00	1.4E+00
Lead	2.0E+03	0.0012	1.0	1.6E+02	0.0090	1.5E+01	1.0	0.67	6.0E+00	2.0E+00	0.33	4.0E-01	0.015	1.0	1.6E+02	9.7E+00	9.7E+01	1.7E+01	1.7E+00
Manganese	2.7E+03	0.0012	1.0	2.1E+02	0.0090	9.1E+01	1.0	0.67	3.7E+01	4.5E+00	0.33	8.9E-01	0.015	1.0	2.5E+02	1.1E+02	3.4E+02	2.3E+00	7.2E-01
Mercury	5.6E+00	0.0012	1.0	4.4E-01	0.0090	7.1E-02	1.0	0.67	2.9E-02	1.8E-01	0.33	3.6E-02	0.015	1.0	5.0E-01	9.9E-02	4.9E-01	5.1E+00	1.0E+00
Nickel	1.3E+02	0.0012	1.0	1.0E+01	0.0090	1.8E+01	1.0	0.67	7.2E+00	***1.8E+00***	0.33	3.6E-01	0.015	1.0	1.8E+01	4.8E+01	9.7E+01	3.7E-01	1.8E-01
Selenium	7.0E+00	0.0012	1.0	5.5E-01	0.0090	2.2E+00	1.0	0.67	8.8E-01	***1.3E+00***	0.33	2.6E-01	0.015	1.0	1.7E+00	1.9E-01	3.2E-01	8.8E+00	5.3E+00
Silver	1.4E+00	0.0012	1.0	1.1E-01	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***4.6E-01***	0.33	9.0E-02	0.015	1.0	4.0E-01	1.9E-01	1.9E+00	2.1E+00	2.1E-01
Thallium	***1.7E+00***	0.0012	1.0	1.3E-01	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***4.6E-01***	0.33	9.0E-02	0.015	1.0	4.2E-01	1.4E-02	1.4E-01	3.1E+01	3.1E+00
Vanadium	2.6E+02	0.0012	1.0	2.0E+01	0.0090	1.8E+01	1.0	0.67	7.2E+00	***4.6E-01***	0.33	9.0E-02	0.015	1.0	2.8E+01	1.1E-01	1.1E+00	2.5E+02	2.5E+01
Zinc	3.1E+03	0.0012	1.0	2.4E+02	0.0090	9.8E+01	1.0	0.67	3.9E+01	8.7E+01	0.33	1.7E+01	0.015	1.0	3.0E+02	2.6E+02	5.1E+02	1.2E+00	5.8E-01

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

Table 7-36
COPECs for Site P
Sauget, IL

Soil HQs	Short-tailed Shrew Modeling HQs (Average Conc.)	Short-tailed Shrew Modeling HQs (Maximum Conc.)	Prairie Vole Modeling HQs (Average Conc.)	Prairie Vole Modeling HQs (Maximum Conc.)
Ethylbenzene	MCPA	Dieldrin (NOAEL only)	Dibenzofuran (NOAEL only)	Dioxins/furans (NOAEL only)
Tetrachloroethene	PCBs (NOAEL only)	MCPA	Cobalt (NOAEL only)	Cobalt (NOAEL only)
Xylenes (total)	Dioxins/furans	PCBs (NOAEL only)	Selenium	Mercury (NOAEL only)
Anthracene	Aluminum	Dioxins/furans	Vanadium (NOAEL only)	Selenium
Benzo(a)anthracene	Arsenic	Aluminum		Vanadium (NOAEL only)
Benzo(a)pyrene	Cobalt	Arsenic		
Benzo(b)fluoranthene	Lead (NOAEL only)	Barium		
Benzo(k)fluoranthene	Mercury (NOAEL only)	Chromium (NOAEL only)		
bis(2-Ethylhexyl)phthalate	Selenium	Cobalt		
Fluoranthene	Silver (NOAEL only)	Lead		
Indeno(1,2,3-cd)pyrene	Thallium	Manganese (NOAEL only)		
Phenanthrene	Vanadium	Mercury		
Pyrene		Selenium		
4,4'-DDT		Silver (NOAEL only)		
Dioxins/furans		Vanadium		
Aluminum		Zinc (NOAEL only)		
Arsenic				
Barium				
Cadmium				
Chromium				
Copper				
Iron				
Lead				
Manganese				
Mercury				
Nickel				
Selenium				
Thallium				
Vanadium				
Zinc				

NOTES:
Analytes listed are only for those exceeding their benchmark/TRV, based on detected values, and were above the background values.
Shaded entries are for those compounds that are COPECs for all receptors and all concentrations.

Table 7-37
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site R (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	6.2E+01	2.9E-03	8.1E-04
1,2-Dichlorobenzene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.4E+03	5.0E-04	3.6E-05
1,3-Dichlorobenzene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.4E+03	5.0E-04	3.6E-05
1,4-Dichlorobenzene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.7E+02	5.0E-04	2.9E-04
2,2'-Oxybis(1-Chloropropane)	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
2,4,5-Trichlorophenol	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	3.5E+01	4.3E-03	1.4E-03
2,4,6-Trichlorophenol	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.8E+02	3.5E+01	8.7E-05	1.4E-03
2,4-Dichlorophenol	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.5E-01	3.5E+00	1.4E-01	1.4E-02
2,4-Dinitrophenol	***9.1E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	1.6E-03	1.6E-02	1.6E+02	1.6E+01
2,4-Dinitrotoluene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.9E-01	2.2E+00	1.7E-01	2.3E-02
2,6-Dinitrotoluene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	8.1E-01	8.1E+00	6.2E-02	6.2E-03
2-Chloronaphthalene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.5E+01	6.0E+01	2.0E-03	8.4E-04
2-Chlorophenol	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.8E+01	5.8E+00	8.7E-04	8.7E-03
2-Methylnaphthalene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.8E+03	2.8E+04	1.8E-05	1.8E-06
2-Methylphenol (o-Cresol)	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
2-Nitroaniline	***9.1E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
2-Nitrophenol	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.9E+00	8.1E+00	1.7E-02	6.2E-03
3,3'-Dichlorobenzidine	***3.6E-01***	0.00012	1.0	1.0E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.5E+01	5.1E+02	6.8E-03	2.0E-04
3/4-Methylphenol (m&p-Cresol)	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
3-Nitroaniline	***9.1E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4,6-Dinitro-2-methylphenol	***9.1E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E-01	5.3E+00	8.9E-01	4.9E-02
4-Bromophenyl Phenyl Ether	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+00	9.2E+00	4.3E-02	5.4E-03
4-Chloro-3-methylphenol	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.3E+02	1.3E+03	3.9E-04	3.9E-05
4-Chloroaniline	***3.6E-01***	0.00012	1.0	1.0E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.4E+00	1.4E+01	7.0E-02	7.0E-03
4-Chlorophenyl Phenyl Ether	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+00	9.2E+00	4.3E-02	5.4E-03
4-Nitroaniline	***9.1E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4-Nitrophenol	***9.1E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E+00	8.1E+00	8.9E-02	3.2E-02
Acenaphthene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Acenaphthylene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Anthracene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+02	1.0E+03	5.0E-04	5.0E-05
Benzo(a)anthracene	1.1E-01	0.00012	1.0	3.1E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(a)pyrene	1.0E-01	0.00012	1.0	3.0E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(b)fluoranthene	1.1E-01	0.00012	1.0	3.0E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(g,h,i)perylene	1.1E-01	0.00012	1.0	3.1E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(k)fluoranthene	1.1E-01	0.00012	1.0	3.0E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
bis(2-Chloroethoxy)methane	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
bis(2-Chloroethyl)ether	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
bis(2-Ethylhexyl)phthalate	1.5E-01	0.00012	1.0	4.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.9E+01	1.9E+02	2.7E-03	2.7E-04
Butyl Benzyl Phthalate	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.8E+01	5.4E+01	2.7E-03	9.2E-04
Carbazole	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.0E+00	3.0E+01	1.7E-02	1.7E-03
Chrysene	7.0E-02	0.00012	1.0	2.0E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Dibenzo(a,h)anthracene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Dibenzofuran	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.5E-02	1.5E-01	3.3E+00	3.3E-01
Diethyl Phthalate	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.5E+03	4.5E+04	1.1E-05	1.1E-06
Dimethyl Phthalate	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.6E+03	4.6E+04	1.1E-05	1.1E-06
Di-n-butylphthalate	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	4.1E-01	1.0	4.1E-02	0.0416	1.0	4.2E-02	5.6E+02	1.9E+03	7.5E-05	2.3E-05
Di-n-octylphthalate	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.5E+02	1.8E+03	9.1E-05	2.7E-05
Fluoranthene	1.4E-01	0.00012	1.0	4.1E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	2.5E+01	4.0E-03	2.0E-03
Fluorene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	2.5E+01	4.0E-03	2.0E-03
Hexachlorobenzene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.2E-02	3.4E-01	5.4E-01	1.5E-01
Hexachlorobutadiene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.3E-01	2.3E-01	2.2E-01	2.2E-01
Hexachlorocyclopentadiene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	6.9E-01	1.3E+00	7.2E-02	3.9E-02
Hexachloroethane	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E-01	1.7E+00	4.3E-01	2.9E-02
Indeno(1,2,3-cd)pyrene	1.5E-01	0.00012	1.0	4.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Isophorone	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.2E+01	2.1E+02	2.3E-03	2.4E-04
Naphthalene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	8.2E+00	1.6E+01	6.1E-03	3.0E-03
Nitrobenzene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.6E-02	4.6E-01	1.1E+00	1.1E-01
N-Nitroso-di-n-propylamine	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E-02	1.0E-01	5.0E+00	5.0E-01
N-Nitrosodiphenylamine	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.3E+02	5.8E+01	2.2E-04	8.7E-04
Pentachlorophenol	***3.6E-02***	0.00012	1.0	1.0E-04	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	2.7E-03	3.7E-01	3.7E+00	7.1E-03	7.1E-04
Phenanthrene	1.0E-01	0.00012	1.0	3.0E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Phenol	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	6.9E+01	1.4E+02	7.2E-04	3.6E-04
Pyrene	1.5E-01	0.00012	1.0	4.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	7.5E+00	1.2E+01	6.7E-03	4.0E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workpla
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-37
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site R (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	***2.2E-03***	0.00012	1.0	6.5E-06	0.0042	4.2E-03	1.0	4.2E-04	0.0416	1.0	4.2E-04	4.2E-01	2.1E+00	1.0E-03	2.0E-04
4,4'-DDE	***2.2E-03***	0.00012	1.0	6.5E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	4.2E-01	2.1E+00	1.2E-03	2.4E-04
4,4'-DDT	2.0E-03	0.00012	1.0	5.8E-06	0.0042	2.5E-03	1.0	2.5E-04	0.0416	1.0	2.6E-04	4.2E-01	2.1E+00	6.1E-04	1.2E-04
Aldrin	***1.1E-03***	0.00012	1.0	3.3E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.8E-01	1.4E+00	9.2E-04	1.8E-04
alpha-BHC	***1.1E-03***	0.00012	1.0	3.3E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.3E+00	4.5E+00	1.1E-04	5.7E-05
alpha-Chlordane	***1.1E-03***	0.00012	1.0	3.3E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	4.6E+00	9.1E+00	5.7E-05	2.8E-05
beta-BHC	***1.1E-03***	0.00012	1.0	3.3E-06	0.0042	3.4E-03	1.0	3.4E-04	0.0416	1.0	3.4E-04	5.7E-01	2.8E+00	6.0E-04	1.2E-04
delta-BHC	***1.1E-03***	0.00012	1.0	3.3E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.3E+00	4.5E+00	1.1E-04	5.7E-05
Dieldrin	1.1E-03	0.00012	1.0	3.3E-06	0.0042	2.0E-03	1.0	2.0E-04	0.0416	1.0	2.1E-04	1.8E-02	1.8E-01	1.2E-02	1.2E-03
Endosulfan I	***1.1E-03***	0.00012	1.0	3.3E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	4.3E-01	4.3E+00	6.0E-04	6.0E-05
Endosulfan II	***2.2E-03***	0.00012	1.0	6.5E-06	0.0042	3.0E-03	1.0	3.0E-04	0.0416	1.0	3.0E-04	4.3E-01	4.3E+00	7.0E-04	7.0E-05
Endosulfan Sulfate	***2.2E-03***	0.00012	1.0	6.5E-06	0.0042	3.7E-03	1.0	3.7E-04	0.0416	1.0	3.7E-04	4.3E-01	4.3E+00	8.6E-04	8.6E-05
Endrin	***2.2E-03***	0.00012	1.0	6.5E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	9.2E-02	9.2E-01	5.5E-03	5.5E-04
Endrin Aldehyde	***2.2E-03***	0.00012	1.0	6.5E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	9.2E-02	9.2E-01	5.5E-03	5.5E-04
Endrin Ketone	***2.2E-03***	0.00012	1.0	6.5E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	9.2E-02	9.2E-01	5.5E-03	5.5E-04
gamma-BHC (Lindane)	***1.1E-03***	0.00012	1.0	3.3E-06	0.0042	1.7E-03	1.0	1.7E-04	0.0416	1.0	1.7E-04	2.0E+01	2.0E+02	8.6E-06	8.6E-07
gamma-Chlordane	9.7E-04	0.00012	1.0	2.8E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	4.6E+00	9.1E+00	5.6E-05	2.8E-05
Heptachlor	***1.1E-03***	0.00012	1.0	3.3E-06	0.0042	2.2E-03	1.0	2.2E-04	0.0416	1.0	2.2E-04	7.4E-02	7.4E-01	3.0E-03	3.0E-04
Heptachlor Epoxide	***1.1E-03***	0.00012	1.0	3.3E-06	0.0042	2.1E-03	1.0	2.1E-04	0.0416	1.0	2.2E-04	1.0E-03	7.5E-03	2.1E-01	2.9E-02
Methoxychlor	***1.1E-02***	0.00012	1.0	3.3E-05	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	2.6E-03	2.3E+00	4.7E+00	1.1E-03	5.5E-04
Toxaphene	***1.1E-01***	0.00012	1.0	3.3E-04	0.0042	***2.6E-01***	1.0	2.6E-02	0.0416	1.0	2.6E-02	7.9E+00	7.9E+01	3.3E-03	3.3E-04
Herbicides															
2,4-D	2.6E-02	0.00012	1.0	7.6E-05	0.0042	4.5E-02	1.0	4.5E-03	0.0416	1.0	4.6E-03	1.6E+00	8.1E+00	2.9E-03	5.7E-04
2,4-DB	3.4E-02	0.00012	1.0	9.9E-05	0.0042	4.0E-02	1.0	4.0E-03	0.0416	1.0	4.1E-03	2.6E+00	8.3E+00	1.6E-03	5.0E-04
2,4,5-T	***1.7E-02***	0.00012	1.0	4.9E-05	0.0042	***1.3E-02***	1.0	1.3E-03	0.0416	1.0	1.3E-03	3.5E+00	1.2E+01	3.7E-04	1.1E-04
2,4,5-TP (Silvex)	1.8E-02	0.00012	1.0	5.2E-05	0.0042	***1.3E-02***	1.0	1.3E-03	0.0416	1.0	1.3E-03	1.1E+00	3.6E+00	1.2E-03	3.6E-04
Dalapon	***4.2E+00***	0.00012	1.0	1.2E-02	0.0042	***3.0E+00***	1.0	3.0E-01	0.0416	1.0	3.1E-01	9.8E+00	3.3E+01	3.2E-02	9.4E-03
Dicamba	***4.2E-02***	0.00012	1.0	1.2E-04	0.0042	***3.0E-02***	1.0	3.0E-03	0.0416	1.0	3.1E-03	3.7E+00	1.2E+01	8.4E-04	2.5E-04
Dichlorprop	7.8E-02	0.00012	1.0	2.2E-04	0.0042	***1.5E-01***	1.0	1.5E-02	0.0416	1.0	1.5E-02	2.0E-01	2.0E+00	7.6E-02	7.6E-03
Dinoseb	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E-01	1.2E+00	4.3E-01	4.3E-02
MCPA	***4.2E+00***	0.00012	1.0	1.2E-02	0.0042	3.4E+00	1.0	3.4E-01	0.0416	1.0	3.5E-01	2.2E-01	1.1E+00	1.6E+00	3.2E-01
MCPP	3.7E+01	0.00012	1.0	1.1E-01	0.0042	***3.0E+00***	1.0	3.0E-01	0.0416	1.0	4.1E-01	3.5E-01	1.0E+00	1.2E+00	3.9E-01
PCBs															
Total PCBs	8.5E-03	0.00012	1.0	2.5E-05	0.0042	***2.5E-02***	1.0	2.5E-03	0.0416	1.0	2.5E-03	1.2E-01	1.2E+00	2.2E-02	2.2E-03
Dioxins/Furans															
TEQ	***1.4E-04***	0.00012	1.0	4.0E-07	0.0042	5.5E-07	1.0	5.5E-08	0.0416	1.0	4.5E-07	1.2E-06	1.2E-05	3.9E-01	3.9E-02
Metals*															
Aluminum	8.8E+03	0.00012	1.0	2.5E+01	0.0042	2.3E+01	1.0	2.3E+00	0.0416	1.0	2.8E+01	1.9E+00	1.9E+01	1.4E+01	1.4E+00
Antimony	8.7E-01	0.00012	1.0	2.5E-03	0.0042	***9.2E-01***	1.0	9.2E-02	0.0416	1.0	9.5E-02	1.2E-01	1.2E+00	7.6E-01	7.6E-02
Arsenic	6.4E+00	0.00012	1.0	1.8E-02	0.0042	***4.6E-01***	1.0	4.6E-02	0.0416	1.0	6.5E-02	1.3E-01	1.3E+00	5.2E-01	5.2E-02
Barium	1.3E+02	0.00012	1.0	3.6E-01	0.0042	9.4E+00	1.0	9.4E-01	0.0416	1.0	1.3E+00	9.4E+00	3.7E+01	1.4E-01	3.6E-02
Beryllium	5.6E-01	0.00012	1.0	1.6E-03	0.0042	***1.8E-01***	1.0	1.8E-02	0.0416	1.0	2.0E-02	7.6E-01	7.6E+00	2.6E-02	2.6E-03
Cadmium	4.4E-01	0.00012	1.0	1.3E-03	0.0042	2.0E-01	1.0	2.0E-02	0.0416	1.0	2.1E-02	3.9E+00	3.9E+01	5.4E-03	5.4E-04
Chromium	1.5E+01	0.00012	1.0	4.4E-02	0.0042	2.8E-01	1.0	2.8E-02	0.0416	1.0	7.2E-02	3.8E+00	1.5E+01	1.9E-02	4.7E-03
Cobalt	9.3E+00	0.00012	1.0	2.7E-02	0.0042	***4.6E-01***	1.0	4.6E-02	0.0416	1.0	7.3E-02	5.8E-02	5.8E-01	1.3E+00	1.3E-01
Copper	2.0E+01	0.00012	1.0	5.6E-02	0.0042	2.8E+00	1.0	2.8E-01	0.0416	1.0	3.4E-01	1.4E+01	1.9E+01	2.3E-02	1.8E-02
Lead	1.8E+01	0.00012	1.0	5.1E-02	0.0042	4.0E+00	1.0	4.0E-01	0.0416	1.0	4.5E-01	9.2E+00	9.2E+01	4.8E-02	4.8E-03
Manganese	7.5E+02	0.00012	1.0	2.2E+00	0.0042	8.6E+00	1.0	8.6E-01	0.0416	1.0	3.0E+00	1.0E+02	3.3E+02	3.0E-02	9.2E-03
Mercury	5.9E-02	0.00012	1.0	1.7E-04	0.0042	1.6E+00	1.0	1.6E-01	0.0416	1.0	1.6E-01	7.6E-02	3.8E-01	2.1E+00	4.2E-01
Nickel	1.9E+01	0.00012	1.0	5.5E-02	0.0042	***1.8E+00***	1.0	1.8E-01	0.0416	1.0	2.4E-01	4.6E+01	9.2E+01	5.2E-03	2.6E-03
Selenium	***5.1E-01***	0.00012	1.0	1.5E-03	0.0042	***4.6E-01***	1.0	4.6E-02	0.0416	1.0	4.8E-02	1.9E-01	3.2E-01	2.5E-01	1.5E-01
Silver	***5.1E-01***	0.00012	1.0	1.5E-03	0.0042	***4.6E-01***	1.0	4.6E-02	0.0416	1.0	4.8E-02	1.8E-01	1.8E+00	2.7E-01	2.7E-02
Thallium	***5.1E-01***	0.00012	1.0	1.5E-03	0.0042	***4.6E-01***	1.0	4.6E-02	0.0416	1.0	4.8E-02	1.2E-02	1.2E-01	4.1E+00	4.1E-01
Vanadium	3.0E+01	0.00012	1.0	8.7E-02	0.0042	***4.6E-01***	1.0	4.6E-02	0.0416	1.0	1.3E-01	1.3E-01	1.3E+00	1.0E+00	1.0E-01
Zinc	7.5E+01	0.00012	1.0	2.2E-01	0.0042	2.6E+01	1.0	2.6E+00	0.0416	1.0	2.9E+00	2.3E+02	4.6E+02	1.2E-02	6.2E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-38
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site R (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	6.2E+01	2.9E-03	8.1E-04
1,2-Dichlorobenzene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.4E+03	5.1E-04	3.6E-05
1,3-Dichlorobenzene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.4E+03	5.1E-04	3.6E-05
1,4-Dichlorobenzene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.7E+02	5.1E-04	2.9E-04
2,2'-Oxybis(1-Chloropropane)	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
2,4,5-Trichlorophenol	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	3.5E+01	4.3E-03	1.4E-03
2,4,6-Trichlorophenol	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.8E+02	3.5E+01	8.7E-05	1.4E-03
2,4-Dichlorophenol	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.5E-01	3.5E+00	1.4E-01	1.4E-02
2,4-Dinitrophenol	***9.5E-01***	0.00012	1.0	2.7E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	1.6E-03	1.6E-02	1.6E+02	1.6E+01
2,4-Dinitrotoluene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.9E-01	2.2E+00	1.7E-01	2.3E-02
2,6-Dinitrotoluene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	8.1E-01	8.1E+00	6.2E-02	6.2E-03
2-Chloronaphthalene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.5E+01	6.0E+01	2.0E-03	8.4E-04
2-Chlorophenol	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.8E+01	5.8E+00	8.7E-04	8.7E-03
2-Methylnaphthalene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.8E+03	2.8E+04	1.8E-05	1.8E-06
2-Methylphenol (o-Cresol)	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
2-Nitroaniline	***9.5E-01***	0.00012	1.0	2.7E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
2-Nitrophenol	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.9E+00	8.1E+00	1.7E-02	6.2E-03
3,3'-Dichlorobenzidine	***3.7E-01***	0.00012	1.0	1.1E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.5E+01	5.1E+02	6.8E-03	2.0E-04
3/4-Methylphenol (m&p-Cresol)	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
3-Nitroaniline	***9.5E-01***	0.00012	1.0	2.7E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4,6-Dinitro-2-methylphenol	***9.5E-01***	0.00012	1.0	2.7E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E-01	5.3E+00	8.9E-01	4.9E-02
4-Bromophenyl Phenyl Ether	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+00	9.2E+00	4.3E-02	5.4E-03
4-Chloro-3-methylphenol	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.3E+02	1.3E+03	3.9E-04	3.9E-05
4-Chloroaniline	***3.7E-01***	0.00012	1.0	1.1E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.4E+00	1.4E+01	7.0E-02	7.0E-03
4-Chlorophenyl Phenyl Ether	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+00	9.2E+00	4.3E-02	5.4E-03
4-Nitroaniline	***9.5E-01***	0.00012	1.0	2.7E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4-Nitrophenol	***9.5E-01***	0.00012	1.0	2.7E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E+00	8.1E+00	8.9E-02	3.2E-02
Acenaphthene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Acenaphthylene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Anthracene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+02	1.0E+03	5.0E-04	5.0E-05
Benzo(a)anthracene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(a)pyrene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(b)fluoranthene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(g,h,i)perylene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(k)fluoranthene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
bis(2-Chloroethoxy)methane	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
bis(2-Chloroethyl)ether	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
bis(2-Ethylhexyl)phthalate	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.9E+01	1.9E+02	2.7E-03	2.7E-04
Butyl Benzyl Phthalate	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.8E+01	5.4E+01	2.7E-03	9.2E-04
Carbazole	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.0E+00	3.0E+01	1.7E-02	1.7E-03
Chrysene	***1.8E-01***	0.00012	1.0	5.0E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Dibenzo(a,h)anthracene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Dibenzofuran	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.5E-02	1.5E-01	3.3E+00	3.3E-01
Diethyl Phthalate	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.5E+03	4.5E+04	1.1E-05	1.1E-06
Dimethyl Phthalate	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.6E+03	4.6E+04	1.1E-05	1.1E-06
Di-n-butylphthalate	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.6E+02	1.9E+03	9.0E-05	2.7E-05
Di-n-octylphthalate	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.5E+02	1.8E+03	9.1E-05	2.7E-05
Fluoranthene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	2.5E+01	4.0E-03	2.0E-03
Fluorene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	2.5E+01	4.0E-03	2.0E-03
Hexachlorobenzene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.2E-02	3.4E-01	5.4E-01	1.5E-01
Hexachlorobutadiene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.3E-01	2.3E-01	2.2E-01	2.2E-01
Hexachlorocyclopentadiene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	6.9E-01	1.3E+00	7.2E-02	3.9E-02
Hexachloroethane	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E-01	1.7E+00	4.3E-01	2.9E-02
Indeno(1,2,3-cd)pyrene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Isophorone	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.2E+01	2.1E+02	2.3E-03	2.4E-04
Naphthalene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	8.2E+00	1.6E+01	6.1E-03	3.0E-03
Nitrobenzene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.6E-02	4.6E-01	1.1E+00	1.1E-01
N-Nitroso-di-n-propylamine	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E-02	1.0E-01	5.0E+00	5.0E-01
N-Nitrosodiphenylamine	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.3E+02	5.8E+01	2.2E-04	8.7E-04
Pentachlorophenol	***4.6E-02***	0.00012	1.0	1.3E-04	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	2.7E-03	3.7E-01	3.7E+00	7.2E-03	7.2E-04
Phenanthrene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Phenol	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	6.9E+01	1.4E+02	7.2E-04	3.6E-04
Pyrene	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	7.5E+00	1.2E+01	6.7E-03	4.0E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-38
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site R (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	***3.6E-03***	0.00012	1.0	1.0E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.1E-04	4.2E-01	2.1E+00	1.2E-03	2.4E-04
4,4'-DDE	***3.6E-03***	0.00012	1.0	1.0E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.1E-04	4.2E-01	2.1E+00	1.2E-03	2.4E-04
4,4'-DDT	2.7E-03	0.00012	1.0	7.8E-06	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.0E-04	4.2E-01	2.1E+00	1.2E-03	2.4E-04
Aldrin	***1.8E-03***	0.00012	1.0	5.2E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.8E-01	1.4E+00	9.2E-04	1.8E-04
alpha-BHC	***1.8E-03***	0.00012	1.0	5.2E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.3E+00	4.5E+00	1.1E-04	5.7E-05
alpha-Chlordane	***1.8E-03***	0.00012	1.0	5.2E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	4.6E+00	9.1E+00	5.7E-05	2.8E-05
beta-BHC	***1.8E-03***	0.00012	1.0	5.2E-06	0.0042	5.2E-03	1.0	5.2E-04	0.0416	1.0	5.3E-04	5.7E-01	2.8E+00	9.3E-04	1.9E-04
delta-BHC	***1.8E-03***	0.00012	1.0	5.2E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.3E+00	4.5E+00	1.1E-04	5.7E-05
Dieldrin	***1.8E-03***	0.00012	1.0	5.0E-06	0.0042	2.9E-03	1.0	2.9E-04	0.0416	1.0	3.0E-04	1.8E-02	1.8E-01	1.7E-02	1.7E-03
Endosulfan I	***1.8E-03***	0.00012	1.0	5.2E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	4.3E-01	4.3E+00	6.0E-04	6.0E-05
Endosulfan II	***3.6E-03***	0.00012	1.0	1.0E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.1E-04	4.3E-01	4.3E+00	1.2E-03	1.2E-04
Endosulfan Sulfate	***3.6E-03***	0.00012	1.0	1.0E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.1E-04	4.3E-01	4.3E+00	1.2E-03	1.2E-04
Endrin	***3.6E-03***	0.00012	1.0	1.0E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.1E-04	9.2E-02	9.2E-01	5.5E-03	5.5E-04
Endrin Aldehyde	***3.6E-03***	0.00012	1.0	1.0E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.1E-04	9.2E-02	9.2E-01	5.5E-03	5.5E-04
Endrin Ketone	***3.6E-03***	0.00012	1.0	1.0E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.1E-04	9.2E-02	9.2E-01	5.5E-03	5.5E-04
gamma-BHC (Lindane)	***1.8E-03***	0.00012	1.0	5.2E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	2.0E+01	2.0E+02	1.3E-05	1.3E-06
gamma-Chlordane	***1.8E-03***	0.00012	1.0	5.2E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	4.6E+00	9.1E+00	5.7E-05	2.8E-05
Heptachlor	***1.8E-03***	0.00012	1.0	5.2E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	7.4E-02	7.4E-01	3.5E-03	3.5E-04
Heptachlor Epoxide	***1.8E-03***	0.00012	1.0	5.2E-06	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.6E-04	1.0E-03	7.5E-03	2.6E-01	3.5E-02
Methoxychlor	***1.8E-02***	0.00012	1.0	5.2E-05	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	2.6E-03	2.3E+00	4.7E+00	1.1E-03	5.6E-04
Toxaphene	***1.8E-01***	0.00012	1.0	5.2E-04	0.0042	***2.6E-01***	1.0	2.6E-02	0.0416	1.0	2.6E-02	7.9E+00	7.9E+01	3.3E-03	3.3E-04
Herbicides															
2,4-D	5.5E-02	0.00012	1.0	1.6E-04	0.0042	6.4E-02	1.0	6.4E-03	0.0416	1.0	6.6E-03	1.6E+00	8.1E+00	4.1E-03	8.1E-04
2,4-DB	6.0E-02	0.00012	1.0	1.7E-04	0.0042	8.7E-02	1.0	8.7E-03	0.0416	1.0	8.9E-03	2.6E+00	8.3E+00	3.4E-03	1.1E-03
2,4,5-T	***2.3E-02***	0.00012	1.0	6.5E-05	0.0042	***1.3E-02***	1.0	1.3E-03	0.0416	1.0	1.3E-03	3.5E+00	1.2E+01	3.8E-04	1.1E-04
2,4,5-TP (Silvex)	***2.3E-02***	0.00012	1.0	6.5E-05	0.0042	***1.3E-02***	1.0	1.3E-03	0.0416	1.0	1.3E-03	1.1E+00	3.6E+00	1.2E-03	3.7E-04
Dalapon	***5.5E+00***	0.00012	1.0	1.6E-02	0.0042	***3.0E+00***	1.0	3.0E-01	0.0416	1.0	3.2E-01	9.8E+00	3.3E+01	3.2E-02	9.5E-03
Dicamba	***5.5E-02***	0.00012	1.0	1.6E-04	0.0042	***3.0E-02***	1.0	3.0E-03	0.0416	1.0	3.2E-03	3.7E+00	1.2E+01	8.5E-04	2.5E-04
Dichlorprop	1.0E-01	0.00012	1.0	2.9E-04	0.0042	***1.5E-01***	1.0	1.5E-02	0.0416	1.0	1.5E-02	2.0E-01	2.0E+00	7.7E-02	7.7E-03
Dinoseb	***1.9E-01***	0.00012	1.0	5.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E-01	1.2E+00	4.3E-01	4.3E-02
MCPA	***5.5E+00***	0.00012	1.0	1.6E-02	0.0042	4.8E+00	1.0	4.8E-01	0.0416	1.0	5.0E-01	2.2E-01	1.1E+00	2.3E+00	4.6E-01
MCPP	5.1E+01	0.00012	1.0	1.5E-01	0.0042	***3.0E+00***	1.0	3.0E-01	0.0416	1.0	4.5E-01	3.5E-01	1.0E+00	1.3E+00	4.3E-01
PCBs															
Total PCBs	***9.5E-03***	0.00012	1.0	2.7E-05	0.0042	***2.5E-02***	1.0	2.5E-03	0.0416	1.0	2.5E-03	1.2E-01	1.2E+00	2.2E-02	2.2E-03
Dioxins/Furans															
TEQ	***2.5E-04***	0.00012	1.0	7.3E-07	0.0042	1.2E-06	1.0	1.2E-07	0.0416	1.0	8.5E-07	1.2E-06	1.2E-05	7.4E-01	7.4E-02
Metals*															
Aluminum	1.0E+04	0.00012	1.0	2.9E+01	0.0042	3.7E+01	1.0	3.7E+00	0.0416	1.0	3.3E+01	1.9E+00	1.9E+01	1.7E+01	1.7E+00
Antimony	***1.1E+00***	0.00012	1.0	3.2E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.2E-01	1.2E+00	8.3E-01	8.3E-02
Arsenic	7.2E+00	0.00012	1.0	2.1E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.1E-02	1.3E-01	1.3E+00	5.6E-01	5.6E-02
Barium	1.5E+02	0.00012	1.0	4.3E-01	0.0042	1.3E+01	1.0	1.3E+00	0.0416	1.0	1.7E+00	9.4E+00	3.7E+01	1.8E-01	4.7E-02
Beryllium	6.8E-01	0.00012	1.0	2.0E-03	0.0042	***2.0E-01***	1.0	2.0E-02	0.0416	1.0	2.2E-02	7.6E-01	7.6E+00	2.9E-02	2.9E-03
Cadmium	7.6E-01	0.00012	1.0	2.2E-03	0.0042	3.5E-01	1.0	3.5E-02	0.0416	1.0	3.7E-02	3.9E+00	3.9E+01	9.6E-03	9.6E-04
Chromium	1.7E+01	0.00012	1.0	4.9E-02	0.0042	5.0E-01	1.0	5.0E-02	0.0416	1.0	9.9E-02	3.8E+00	1.5E+01	2.6E-02	6.5E-03
Cobalt	1.5E+01	0.00012	1.0	4.3E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	9.3E-02	5.8E-02	5.8E-01	1.6E+00	1.6E-01
Copper	2.5E+01	0.00012	1.0	7.2E-02	0.0042	3.5E+00	1.0	3.5E-01	0.0416	1.0	4.2E-01	1.4E+01	1.9E+01	2.9E-02	2.2E-02
Lead	3.3E+01	0.00012	1.0	9.5E-02	0.0042	7.6E+00	1.0	7.6E-01	0.0416	1.0	8.6E-01	9.2E+00	9.2E+01	9.2E-02	9.2E-03
Manganese	1.2E+03	0.00012	1.0	3.5E+00	0.0042	9.7E+00	1.0	9.7E-01	0.0416	1.0	4.4E+00	1.0E+02	3.3E+02	4.4E-02	1.3E-02
Mercury	7.6E-02	0.00012	1.0	2.2E-04	0.0042	2.5E+00	1.0	2.5E-01	0.0416	1.0	2.5E-01	7.6E-02	3.8E-01	3.3E+00	6.6E-01
Nickel	2.1E+01	0.00012	1.0	6.1E-02	0.0042	***2.0E+00***	1.0	2.0E-01	0.0416	1.0	2.6E-01	4.6E+01	9.2E+01	5.6E-03	2.8E-03
Selenium	***5.5E-01***	0.00012	1.0	1.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.9E-01	3.2E-01	2.7E-01	1.6E-01
Silver	***5.5E-01***	0.00012	1.0	1.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.8E-01	1.8E+00	2.9E-01	2.9E-02
Thallium	***5.5E-01***	0.00012	1.0	1.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E-02	1.2E-01	4.4E+00	4.4E-01
Vanadium	3.4E+01	0.00012	1.0	9.8E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.5E-01	1.3E-01	1.3E+00	1.1E+00	1.1E-01
Zinc	1.2E+02	0.00012	1.0	3.5E-01	0.0042	4.4E+01	1.0	4.4E+00	0.0416	1.0	4.7E+00	2.3E+02	4.6E+02	2.1E-02	1.0E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-39
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site R (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs																(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	6.5E+01	2.9E-02	7.9E-03
1,2-Dichlorobenzene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+02	1.4E+03	5.0E-03	3.5E-04
1,3-Dichlorobenzene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+02	1.4E+03	5.0E-03	3.5E-04
1,4-Dichlorobenzene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+02	1.8E+02	5.0E-03	2.8E-03
2,2'-Oxybis(1-Chloropropane)	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
2,4,5-Trichlorophenol	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E+01	3.6E+01	4.3E-02	1.4E-02
2,4,6-Trichlorophenol	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	6.0E+02	3.6E+01	8.5E-04	1.4E-02
2,4-Dichlorophenol	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.6E-01	3.6E+00	1.4E+00	1.4E-01
2,4-Dinitrophenol	***9.1E-01***	0.0012	1.0	7.1E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	1.6E-03	1.6E-02	1.6E+03	1.6E+02
2,4-Dinitrotoluene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.0E-01	2.2E+00	1.7E+00	2.3E-01
2,6-Dinitrotoluene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	8.5E-01	8.5E+00	6.1E-01	6.1E-02
2-Chloronaphthalene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.6E+01	6.3E+01	2.0E-02	8.2E-03
2-Chlorophenol	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	6.0E+01	6.0E+00	8.5E-03	8.5E-02
2-Methylnaphthalene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.0E+03	3.0E+04	1.7E-04	1.7E-05
2-Methylphenol (o-Cresol)	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.8E+02	2.8E+03	1.8E-03	1.8E-04
2-Nitroaniline	***9.1E-01***	0.0012	1.0	7.1E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
2-Nitrophenol	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.0E+00	8.5E+00	1.7E-01	6.1E-02
3,3'-Dichlorobenzidine	***3.6E-01***	0.0012	1.0	2.8E-02	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.0E+00	1.6E+01	5.3E+02	6.6E-02	1.9E-03
3/4-Methylphenol (m&p-Cresol)	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.8E+02	2.8E+03	1.8E-03	1.8E-04
3-Nitroaniline	***9.1E-01***	0.0012	1.0	7.1E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
4,6-Dinitro-2-methylphenol	***9.1E-01***	0.0012	1.0	7.1E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	3.0E-01	5.5E+00	8.6E+00	4.7E-01
4-Bromophenyl Phenyl Ether	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E+00	9.7E+00	4.3E-01	5.3E-02
4-Chloro-3-methylphenol	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.4E+02	1.4E+03	3.8E-03	3.8E-04
4-Chloroaniline	***3.6E-01***	0.0012	1.0	2.8E-02	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.0E+00	1.5E+00	1.5E+01	6.8E-01	6.8E-02
4-Chlorophenyl Phenyl Ether	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E+00	9.7E+00	4.3E-01	5.3E-02
4-Nitroaniline	***9.1E-01***	0.0012	1.0	7.1E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
4-Nitrophenol	***9.1E-01***	0.0012	1.0	7.1E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	3.0E+00	8.5E+00	8.6E-01	3.1E-01
Acenaphthene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Acenaphthylene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Anthracene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+02	1.0E+03	4.9E-03	4.9E-04
Benzo(a)anthracene	1.1E-01	0.0012	1.0	8.2E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(a)pyrene	1.0E-01	0.0012	1.0	8.2E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(b)fluoranthene	1.1E-01	0.0012	1.0	8.2E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(g,h,i)perylene	1.1E-01	0.0012	1.0	8.4E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(k)fluoranthene	1.1E-01	0.0012	1.0	8.2E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
bis(2-Chloroethoxy)methane	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
bis(2-Chloroethyl)ether	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
bis(2-Ethylhexyl)phthalate	1.5E-01	0.0012	1.0	1.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.3E+01	1.3E+02	4.0E-02	4.0E-03
Butyl Benzyl Phthalate	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.9E+01	5.7E+01	2.7E-02	9.1E-03
Carbazole	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.1E+00	3.1E+01	1.6E-01	1.6E-02
Chrysene	7.0E-02	0.0012	1.0	5.4E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.8E-01	4.8E-02
Dibenzo(a,h)anthracene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Dibenzofuran	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.6E-02	1.6E-01	3.2E+01	3.2E+00
Diethyl Phthalate	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	5.6E+03	5.6E+04	9.2E-05	9.2E-06
Dimethyl Phthalate	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	4.8E+03	4.8E+04	1.1E-04	1.1E-05
Di-n-butylphthalate	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	4.3E+02	1.4E+03	1.2E-03	3.6E-04
Di-n-octylphthalate	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	5.7E+02	1.9E+03	9.0E-04	2.7E-04
Fluoranthene	1.4E-01	0.0012	1.0	1.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.3E+01	2.6E+01	3.9E-02	2.0E-02
Fluorene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.3E+01	2.6E+01	3.9E-02	2.0E-02
Hexachlorobenzene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	9.7E-02	3.5E-01	5.3E+00	1.5E+00
Hexachlorobutadiene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.4E-01	2.4E-01	2.1E+00	2.1E+00
Hexachlorocyclopentadiene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	7.2E-01	1.3E+00	7.1E-01	3.9E-01
Hexachloroethane	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E-01	1.8E+00	4.3E+00	2.8E-01
Indeno(1,2,3-cd)pyrene	1.5E-01	0.0012	1.0	1.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Isophorone	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.2E+01	2.2E+02	2.3E-02	2.4E-03
Naphthalene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	8.6E+00	1.7E+01	6.0E-02	3.0E-02
Nitrobenzene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	4.8E-02	4.8E-01	1.1E+01	1.1E+00
N-Nitroso-di-n-propylamine	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E-02	1.0E-01	4.9E+01	4.9E+00
N-Nitrosodiphenylamine	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.4E+02	6.0E+01	2.1E-03	8.5E-03
Pentachlorophenol	***3.6E-02***	0.0012	1.0	2.8E-03	0.0090	8.2E-02	1.0	0.67	3.3E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	4.1E-02	4.3E-01	4.3E+00	9.5E-02	9.5E-03
Phenanthrene	1.0E-01	0.0012	1.0	8.0E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Phenol	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	7.2E+01	1.4E+02	7.1E-03	3.5E-03
Pyrene	1.5E-01	0.0012	1.0	1.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	7.8E+00	1.3E+01	6.5E-02	3.9E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected value
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-39
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site R (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																NOAEL	LOAEL	NOAEL HQ	LOAEL HQ
Pesticides																			
4,4'-DDD	***2.2E-03***	0.0012	1.0	1.7E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.2E-03	3.4E-01	1.7E+00	2.7E-02	5.3E-03
4,4'-DDE	***2.2E-03***	0.0012	1.0	1.7E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.2E-03	3.4E-01	1.7E+00	2.7E-02	5.3E-03
4,4'-DDT	2.0E-03	0.0012	1.0	1.6E-04	0.0090	1.4E-02	1.0	0.67	5.4E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	6.6E-03	3.4E-01	1.7E+00	1.9E-02	3.8E-03
Aldrin	***1.1E-03***	0.0012	1.0	8.9E-05	0.0090	8.5E-03	1.0	0.67	3.4E-03	1.9E-03	0.33	3.7E-04	0.015	1.0	3.9E-03	3.1E-01	1.6E+00	1.2E-02	2.5E-03
alpha-BHC	***1.1E-03***	0.0012	1.0	8.9E-05	0.0090	1.0E-02	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	2.5E+00	5.1E+00	1.8E-03	9.1E-04
alpha-Chlordane	***1.1E-03***	0.0012	1.0	8.9E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	5.2E+00	1.0E+01	8.9E-04	4.5E-04
beta-BHC	***1.1E-03***	0.0012	1.0	8.9E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	6.3E-01	3.2E+00	7.3E-03	1.5E-03
delta-BHC	***1.1E-03***	0.0012	1.0	8.9E-05	0.0090	1.1E-02	1.0	0.67	4.4E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	4.8E-03	2.5E+00	5.1E+00	1.9E-03	9.4E-04
Dieldrin	1.1E-03	0.0012	1.0	8.8E-05	0.0090	1.4E-02	1.0	0.67	5.5E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	6.6E-03	1.7E-02	1.7E-01	3.9E-01	3.9E-02
Endosulfan I	***1.1E-03***	0.0012	1.0	8.9E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	5.9E-01	5.9E+00	7.8E-03	7.8E-04
Endosulfan II	***2.2E-03***	0.0012	1.0	1.7E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.2E-03	5.9E-01	5.9E+00	1.5E-02	1.5E-03
Endosulfan Sulfate	***2.2E-03***	0.0012	1.0	1.7E-04	0.0090	1.5E-02	1.0	0.67	5.9E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	7.0E-03	5.9E-01	5.9E+00	1.2E-02	1.2E-03
Endrin	***2.2E-03***	0.0012	1.0	1.7E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.2E-03	9.4E-02	9.4E-01	9.8E-02	9.8E-03
Endrin Aldehyde	***2.2E-03***	0.0012	1.0	1.7E-04	0.0090	1.7E-02	1.0	0.67	6.8E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	7.9E-03	9.4E-02	9.4E-01	8.4E-02	8.4E-03
Endrin Ketone	***2.2E-03***	0.0012	1.0	1.7E-04	0.0090	2.2E-02	1.0	0.67	8.9E-03	4.2E-03	0.33	8.3E-04	0.015	1.0	9.9E-03	9.4E-02	9.4E-01	1.1E-01	1.1E-02
gamma-BHC (Lindane)	***1.1E-03***	0.0012	1.0	8.9E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	4.4E-03	2.7E+01	2.7E+02	1.6E-04	1.6E-05
gamma-Chlordane	9.7E-04	0.0012	1.0	7.6E-05	0.0090	8.8E-03	1.0	0.67	3.6E-03	1.6E-03	0.33	3.2E-04	0.015	1.0	3.9E-03	5.2E+00	1.0E+01	7.6E-04	3.8E-04
Heptachlor	***1.1E-03***	0.0012	1.0	8.9E-05	0.0090	9.7E-03	1.0	0.67	3.9E-03	1.7E-03	0.33	3.4E-04	0.015	1.0	4.3E-03	7.0E-02	7.0E-01	6.2E-02	6.2E-03
Heptachlor Epoxide	***1.1E-03***	0.0012	1.0	8.9E-05	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	9.5E-04	7.0E-03	4.8E+00	6.6E-01
Methoxychlor	***1.1E-02***	0.0012	1.0	8.9E-04	0.0090	4.7E-02	1.0	0.67	1.9E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	2.5E-02	2.0E+00	4.0E+00	1.3E-02	6.3E-03
Toxaphene	***1.1E-01***	0.0012	1.0	8.9E-03	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***2.6E-01***	0.33	5.0E-02	0.015	1.0	4.6E-01	7.9E+00	7.9E+01	5.8E-02	5.8E-03
Herbicides																			
2,4-D	2.6E-02	0.0012	1.0	2.0E-03	0.0090	6.2E-02	1.0	0.67	2.5E-02	1.1E-01	0.33	2.2E-02	0.015	1.0	4.9E-02	1.9E+00	9.4E+00	2.6E-02	5.2E-03
2,4-DB	3.4E-02	0.0012	1.0	2.7E-03	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	2.0E-02	0.33	4.0E-03	0.015	1.0	2.7E-02	3.1E+00	9.6E+00	8.8E-03	2.8E-03
2,4,5-T	***1.7E-02***	0.0012	1.0	1.3E-03	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	2.4E-02	3.6E+00	1.2E+01	6.6E-03	2.0E-03
2,4,5-TP (Silvex)	1.8E-02	0.0012	1.0	1.4E-03	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	2.4E-02	1.1E+00	3.7E+00	2.1E-02	6.4E-03
Dalapon	***4.2E+00***	0.0012	1.0	3.2E-01	0.0090	***1.2E+01***	1.0	0.67	4.8E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	5.7E+00	1.0E+01	3.5E+01	5.6E-01	1.7E-01
Dicamba	***4.2E-02***	0.0012	1.0	3.2E-03	0.0090	***1.2E-01***	1.0	0.67	4.8E-02	***3.0E-02***	0.33	5.9E-03	0.015	1.0	5.7E-02	3.9E+00	1.3E+01	1.5E-02	4.4E-03
Dichlorprop	7.8E-02	0.0012	1.0	6.0E-03	0.0090	***6.0E-01***	1.0	0.67	2.4E-01	***1.5E-01***	0.33	3.0E-02	0.015	1.0	2.8E-01	2.1E-01	2.1E+00	1.3E+00	1.3E-01
Dinoseb	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E-01	1.2E+00	4.3E+00	4.3E-01
MCPA	***4.2E+00***	0.0012	1.0	3.2E-01	0.0090	2.9E+01	1.0	0.67	1.2E+01	***3.0E+00***	0.33	5.9E-01	0.015	1.0	1.3E+01	2.2E-01	1.1E+00	5.6E+01	1.1E+01
MCPP	3.7E+01	0.0012	1.0	2.9E+00	0.0090	***1.2E+01***	1.0	0.67	4.8E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	8.3E+00	3.6E-01	1.1E+00	2.3E+01	7.6E+00
PCBs																			
Total PCBs	8.5E-03	0.0012	1.0	6.7E-04	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***2.5E-02***	0.33	5.0E-03	0.015	1.0	2.6E-02	1.2E-01	1.2E+00	2.1E-01	2.1E-02
Dioxins/Furans																			
TEQ	***1.4E-04***	0.0012	1.0	1.1E-05	0.0090	1.1E-06	1.0	0.67	4.5E-07	1.3E-05	0.33	2.7E-06	0.015	1.0	1.4E-05	1.2E-06	1.2E-05	1.2E+01	1.2E+00
Metals*																			
Aluminum	8.8E+03	0.0012	1.0	6.8E+02	0.0090	5.3E+02	1.0	0.67	2.1E+02	1.5E+01	0.33	3.0E+00	0.015	1.0	9.0E+02	2.0E+00	2.0E+01	4.5E+02	4.5E+01
Antimony	8.7E-01	0.0012	1.0	6.8E-02	0.0090	***9.4E-01***	1.0	0.67	3.8E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	6.4E-01	1.3E-01	1.3E+00	4.9E+00	4.9E-01
Arsenic	6.4E+00	0.0012	1.0	5.0E-01	0.0090	5.2E+00	1.0	0.67	2.1E+00	***5.0E-01***	0.33	9.9E-02	0.015	1.0	2.7E+00	1.4E-01	1.4E+00	2.0E+01	2.0E+00
Barium	1.3E+02	0.0012	1.0	9.8E+00	0.0090	6.8E+00	1.0	0.67	2.7E+00	1.9E+00	0.33	3.8E-01	0.015	1.0	1.3E+01	1.1E+01	4.4E+01	1.1E+00	2.9E-01
Beryllium	5.6E-01	0.0012	1.0	4.4E-02	0.0090	***1.9E-01***	1.0	0.67	7.6E-02	***2.0E-01***	0.33	4.0E-02	0.015	1.0	1.6E-01	8.0E-01	8.0E+00	2.0E-01	2.0E-02
Cadmium	4.4E-01	0.0012	1.0	3.5E-02	0.0090	8.8E-01	1.0	0.67	3.6E-01	3.6E-01	0.33	7.1E-02	0.015	1.0	4.6E-01	5.8E+00	5.8E+01	7.9E-02	7.9E-03
Chromium	1.5E+01	0.0012	1.0	1.2E+00	0.0090	8.5E-01	1.0	0.67	3.4E-01	2.0E-01	0.33	4.0E-02	0.015	1.0	1.6E+00	4.0E+00	1.6E+01	4.0E-01	9.9E-02
Cobalt	9.3E+00	0.0012	1.0	7.2E-01	0.0090	1.4E+00	1.0	0.67	5.7E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	1.4E+00	6.0E-02	6.0E-01	2.3E+01	2.3E+00
Copper	2.0E+01	0.0012	1.0	1.5E+00	0.0090	3.1E+00	1.0	0.67	1.3E+00	2.0E+01	0.33	4.0E+00	0.015	1.0	6.7E+00	1.5E+01	2.0E+01	4.5E-01	3.4E-01
Lead	1.8E+01	0.0012	1.0	1.4E+00	0.0090	1.4E+00	1.0	0.67	5.7E-01	1.0E+00	0.33	2.0E-01	0.015	1.0	2.1E+00	9.7E+00	9.7E+01	2.2E-01	2.2E-02
Manganese	7.5E+02	0.0012	1.0	5.9E+01	0.0090	3.2E+01	1.0	0.67	1.3E+01	5.5E+00	0.33	1.1E+00	0.015	1.0	7.2E+01	1.1E+02	3.4E+02	6.8E-01	2.1E-01
Mercury	5.9E-02	0.0012	1.0	4.6E-03	0.0090	2.6E-02	1.0	0.67	1.0E-02	1.3E-01	0.33	2.6E-02	0.015	1.0	4.1E-02	9.9E-02	4.9E-01	4.1E-01	8.3E-02
Nickel	1.9E+01	0.0012	1.0	1.5E+00	0.0090	1.7E+00	1.0	0.67	6.7E-01	***2.0E+00***	0.33	4.0E-01	0.015	1.0	2.5E+00	4.8E+01	9.7E+01	5.3E-02	2.6E-02
Selenium	***5.1E-01***	0.0012	1.0	3.9E-02	0.0090	5.1E-01	1.0	0.67	2.1E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.5E-01	1.9E-01	3.2E-01	1.8E+00	1.1E+00
Silver	***5.1E-01***	0.0012	1.0	3.9E-02	0.0090	***4.7E-01***	1.0	0.67	1.9E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.3E-01	1.9E-01	1.9E+00	1.7E+00	1.7E-01
Thallium	***5.1E-01***	0.0012	1.0	3.9E-02	0.0090	***4.7E-01***	1.0	0.67	1.9E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.3E-01	1.4E-02	1.4E-01	2.4E+01	2.4E+00
Vanadium	3.0E+01	0.0012	1.0	2.3E+00	0.0090	1.7E+00	1.0	0.67	6.9E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.1E+00	1.1E-01	1.1E+00	2.8E+01	2.8E+00
Zinc	7.5E+01	0.0012	1.0	5.9E+00	0.0090	2.3E+01	1.0	0.67	9.1E+00	5.6E+01	0.33	1.1E+01	0.015	1.0	2.6E+01	2.6E+02	5.1E+02	1.0E-01	5.1E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected value
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-40
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site R (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
SVOCs																			
1,2,4-Trichlorobenzene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	6.5E+01	2.9E-02	7.9E-03
1,2-Dichlorobenzene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+02	1.4E+03	5.0E-03	3.5E-04
1,3-Dichlorobenzene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+02	1.4E+03	5.0E-03	3.5E-04
1,4-Dichlorobenzene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+02	1.8E+02	5.0E-03	2.8E-03
2,2'-Oxybis(1-Chloropropane)	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
2,4,5-Trichlorophenol	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E+01	3.6E+01	4.3E-02	1.4E-02
2,4,6-Trichlorophenol	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	6.0E+02	3.6E+01	8.5E-04	1.4E-02
2,4-Dichlorophenol	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.6E-01	3.6E+00	1.4E+00	1.4E-01
2,4-Dinitrophenol	***9.5E-01***	0.0012	1.0	7.4E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	1.6E-03	1.6E-02	1.6E+03	1.6E+02
2,4-Dinitrotoluene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.0E-01	2.2E+00	1.7E+00	2.3E-01
2,6-Dinitrotoluene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	8.5E-01	8.5E+00	6.1E-01	6.1E-02
2-Chloronaphthalene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.6E+01	6.3E+01	2.0E-02	8.2E-03
2-Chlorophenol	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	6.0E+01	6.0E+00	8.5E-03	8.5E-02
2-Methylnaphthalene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.0E+03	3.0E+04	1.7E-04	1.7E-05
2-Methylphenol (o-Cresol)	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.8E+02	2.8E+03	1.8E-03	1.8E-04
2-Nitroaniline	***9.5E-01***	0.0012	1.0	7.4E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
2-Nitrophenol	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.0E+00	8.5E+00	1.7E-01	6.1E-02
3,3'-Dichlorobenzidine	***3.7E-01***	0.0012	1.0	2.9E-02	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.0E+00	1.6E+01	5.3E+02	6.6E-02	1.9E-03
3/4-Methylphenol (m&p-Cresol)	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.8E+02	2.8E+03	1.8E-03	1.8E-04
3-Nitroaniline	***9.5E-01***	0.0012	1.0	7.4E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
4,6-Dinitro-2-methylphenol	***9.5E-01***	0.0012	1.0	7.4E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	3.0E-01	5.5E+00	8.6E+00	4.7E-01
4-Bromophenyl Phenyl Ether	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E+00	9.7E+00	4.3E-01	5.3E-02
4-Chloro-3-methylphenol	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.4E+02	1.4E+03	3.8E-03	3.8E-04
4-Chloroaniline	***3.7E-01***	0.0012	1.0	2.9E-02	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.0E+00	1.5E+00	1.5E+01	6.8E-01	6.8E-02
4-Chlorophenyl Phenyl Ether	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E+00	9.7E+00	4.3E-01	5.3E-02
4-Nitroaniline	***9.5E-01***	0.0012	1.0	7.4E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
4-Nitrophenol	***9.5E-01***	0.0012	1.0	7.4E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	3.0E+00	8.5E+00	8.6E-01	3.1E-01
Acenaphthene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Acenaphthylene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Anthracene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+02	1.0E+03	4.9E-03	4.9E-04
Benzo(a)anthracene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(a)pyrene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(b)fluoranthene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(g,h,i)perylene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Benzo(k)fluoranthene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
bis(2-Chloroethoxy)methane	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
bis(2-Chloroethyl)ether	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
bis(2-Ethylhexyl)phthalate	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.3E+01	1.3E+02	4.1E-02	4.1E-03
Butyl Benzyl Phthalate	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.9E+01	5.7E+01	2.7E-02	9.1E-03
Carbazole	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	3.1E+00	3.1E+01	1.6E-01	1.6E-02
Chrysene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Dibenzo(a,h)anthracene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Dibenzofuran	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.6E-02	1.6E-01	3.2E+01	3.2E+00
Diethyl Phthalate	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	5.6E+03	5.6E+04	9.2E-05	9.2E-06
Dimethyl Phthalate	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	4.8E+03	4.8E+04	1.1E-04	1.1E-05
Di-n-butylphthalate	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	4.3E+02	1.4E+03	1.2E-03	3.6E-04
Di-n-octylphthalate	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	5.7E+02	1.9E+03	9.0E-04	2.7E-04
Fluoranthene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.3E+01	2.6E+01	3.9E-02	2.0E-02
Fluorene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.3E+01	2.6E+01	3.9E-02	2.0E-02
Hexachlorobenzene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	9.7E-02	3.5E-01	5.3E+00	1.5E+00
Hexachlorobutadiene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.4E-01	2.4E-01	2.1E+00	2.1E+00
Hexachlorocyclopentadiene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	7.2E-01	1.3E+00	7.1E-01	3.9E-01
Hexachloroethane	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E-01	1.8E+00	4.3E+00	2.8E-01
Indeno(1,2,3-cd)pyrene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E+00	1.0E+01	4.9E-01	4.9E-02
Isophorone	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.2E+01	2.2E+02	2.3E-02	2.4E-03
Naphthalene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	8.6E+00	1.7E+01	6.0E-02	3.0E-02
Nitrobenzene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	4.8E-02	4.8E-01	1.1E+01	1.1E+00
N-Nitroso-di-n-propylamine	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.0E-02	1.0E-01	4.9E+01	4.9E+00
N-Nitrosodiphenylamine	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	2.4E+02	6.0E+01	2.1E-03	8.5E-03
Pentachlorophenol	***4.6E-02***	0.0012	1.0	3.6E-03	0.0090	***1.0E-01***	1.0	0.67	4.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	4.9E-02	4.3E-01	4.3E+00	1.1E-01	1.1E-02
Phenanthrene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Phenol	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	7.2E+01	1.4E+02	7.1E-03	3.5E-03
Pyrene	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	7.8E+00	1.3E+01	6.6E-02	3.9E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-40
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site R (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																NOAEL	LOAEL	NOAEL HQ	LOAEL HQ
Pesticides																			
4,4'-DDD	***3.6E-03***	0.0012	1.0	2.8E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.3E-03	3.4E-01	1.7E+00	2.7E-02	5.4E-03
4,4'-DDE	***3.6E-03***	0.0012	1.0	2.8E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.3E-03	3.4E-01	1.7E+00	2.7E-02	5.4E-03
4,4'-DDT	2.7E-03	0.0012	1.0	2.1E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.2E-03	3.4E-01	1.7E+00	2.7E-02	5.4E-03
Aldrin	***1.8E-03***	0.0012	1.0	1.4E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.9E-03	0.33	3.7E-04	0.015	1.0	4.5E-03	3.1E-01	1.6E+00	1.4E-02	2.9E-03
alpha-BHC	***1.8E-03***	0.0012	1.0	1.4E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.7E-03	2.5E+00	5.1E+00	1.8E-03	9.2E-04
alpha-Chlordane	***1.8E-03***	0.0012	1.0	1.4E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.7E-03	5.2E+00	1.0E+01	9.0E-04	4.5E-04
beta-BHC	***1.8E-03***	0.0012	1.0	1.4E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.7E-03	6.3E-01	3.2E+00	7.4E-03	1.5E-03
delta-BHC	***1.8E-03***	0.0012	1.0	1.4E-04	0.0090	1.7E-02	1.0	0.67	6.8E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	7.3E-03	2.5E+00	5.1E+00	2.9E-03	1.4E-03
Dieldrin	***1.8E-03***	0.0012	1.0	1.4E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.2E-03	1.7E-02	1.7E-01	5.4E-01	5.4E-02
Endosulfan I	***1.8E-03***	0.0012	1.0	1.4E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.7E-03	5.9E-01	5.9E+00	7.9E-03	7.9E-04
Endosulfan II	***3.6E-03***	0.0012	1.0	2.8E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.3E-03	5.9E-01	5.9E+00	1.6E-02	1.6E-03
Endosulfan Sulfate	***3.6E-03***	0.0012	1.0	2.8E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.3E-03	5.9E-01	5.9E+00	1.6E-02	1.6E-03
Endrin	***3.6E-03***	0.0012	1.0	2.8E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.3E-03	9.4E-02	9.4E-01	9.9E-02	9.9E-03
Endrin Aldehyde	***3.6E-03***	0.0012	1.0	2.8E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.3E-03	9.4E-02	9.4E-01	9.9E-02	9.9E-03
Endrin Ketone	***3.6E-03***	0.0012	1.0	2.8E-04	0.0090	3.1E-02	1.0	0.67	1.2E-02	4.2E-03	0.33	8.3E-04	0.015	1.0	1.4E-02	9.4E-02	9.4E-01	1.4E-01	1.4E-02
gamma-BHC (Lindane)	***1.8E-03***	0.0012	1.0	1.4E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	4.5E-03	2.7E+01	2.7E+02	1.7E-04	1.7E-05
gamma-Chlordane	***1.8E-03***	0.0012	1.0	1.4E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.6E-03	0.33	3.2E-04	0.015	1.0	4.5E-03	5.2E+00	1.0E+01	8.6E-04	4.3E-04
Heptachlor	***1.8E-03***	0.0012	1.0	1.4E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.7E-03	0.33	3.4E-04	0.015	1.0	4.5E-03	7.0E-02	7.0E-01	6.5E-02	6.5E-03
Heptachlor Epoxide	***1.8E-03***	0.0012	1.0	1.4E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.7E-03	9.5E-04	7.0E-03	4.9E+00	6.7E-01
Methoxychlor	***1.8E-02***	0.0012	1.0	1.4E-03	0.0090	***1.0E-01***	1.0	0.67	4.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	4.7E-02	2.0E+00	4.0E+00	2.4E-02	1.2E-02
Toxaphene	***1.8E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***2.6E-01***	0.33	5.0E-02	0.015	1.0	4.7E-01	7.9E+00	7.9E+01	5.9E-02	5.9E-03
Herbicides																			
2,4-D	5.5E-02	0.0012	1.0	4.3E-03	0.0090	1.1E-01	1.0	0.67	4.4E-02	1.1E-01	0.33	2.2E-02	0.015	1.0	7.0E-02	1.9E+00	9.4E+00	3.7E-02	7.5E-03
2,4-DB	6.0E-02	0.0012	1.0	4.7E-03	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	2.0E-02	0.33	4.0E-03	0.015	1.0	2.9E-02	3.1E+00	9.6E+00	9.4E-03	3.0E-03
2,4,5-T	***2.3E-02***	0.0012	1.0	1.8E-03	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	2.4E-02	3.6E+00	1.2E+01	6.7E-03	2.0E-03
2,4,5-TP (Silvex)	***2.3E-02***	0.0012	1.0	1.8E-03	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	2.4E-02	1.1E+00	3.7E+00	2.2E-02	6.5E-03
Dalapon	***5.5E+00***	0.0012	1.0	4.3E-01	0.0090	***1.2E+01***	1.0	0.67	4.8E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	5.8E+00	1.0E+01	3.5E+01	5.7E-01	1.7E-01
Dicamba	***5.5E-02***	0.0012	1.0	4.3E-03	0.0090	***1.2E-01***	1.0	0.67	4.8E-02	***3.0E-02***	0.33	5.9E-03	0.015	1.0	5.8E-02	3.9E+00	1.3E+01	1.5E-02	4.5E-03
Dichlorprop	1.0E-01	0.0012	1.0	7.8E-03	0.0090	***6.0E-01***	1.0	0.67	2.4E-01	***1.5E-01***	0.33	3.0E-02	0.015	1.0	2.8E-01	2.1E-01	2.1E+00	1.3E+00	1.3E-01
Dinoseb	***1.9E-01***	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.2E-01	1.2E+00	4.3E+00	4.3E-01
MCPA	***5.5E+00***	0.0012	1.0	4.3E-01	0.0090	4.2E+01	1.0	0.67	1.7E+01	***3.0E+00***	0.33	5.9E-01	0.015	1.0	1.8E+01	2.2E-01	1.1E+00	8.0E+01	1.6E+01
MCPP	5.1E+01	0.0012	1.0	4.0E+00	0.0090	***1.2E+01***	1.0	0.67	4.8E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	9.4E+00	3.6E-01	1.1E+00	2.6E+01	8.6E+00
PCBs																			
Total PCBs	***9.5E-03***	0.0012	1.0	7.4E-04	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***2.5E-02***	0.33	5.0E-03	0.015	1.0	2.6E-02	1.2E-01	1.2E+00	2.1E-01	2.1E-02
Dioxins/Furans																			
TEQ	***2.5E-04***	0.0012	1.0	2.0E-05	0.0090	1.5E-06	1.0	0.67	5.9E-07	1.3E-05	0.33	2.7E-06	0.015	1.0	2.3E-05	1.2E-06	1.2E-05	1.9E+01	1.9E+00
Metals*																			
Aluminum	1.0E+04	0.0012	1.0	7.8E+02	0.0090	7.1E+02	1.0	0.67	2.9E+02	1.5E+01	0.33	3.0E+00	0.015	1.0	1.1E+03	2.0E+00	2.0E+01	5.3E+02	5.3E+01
Antimony	***1.1E+00***	0.0012	1.0	8.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	6.9E-01	1.3E-01	1.3E+00	5.3E+00	5.3E-01
Arsenic	7.2E+00	0.0012	1.0	5.6E-01	0.0090	5.6E+00	1.0	0.67	2.3E+00	***5.0E-01***	0.33	9.9E-02	0.015	1.0	2.9E+00	1.4E-01	1.4E+00	2.1E+01	2.1E+00
Barium	1.5E+02	0.0012	1.0	1.2E+01	0.0090	8.3E+00	1.0	0.67	3.3E+00	1.9E+00	0.33	3.8E-01	0.015	1.0	1.5E+01	1.1E+01	4.4E+01	1.4E+00	3.5E-01
Beryllium	6.8E-01	0.0012	1.0	5.3E-02	0.0090	***2.0E-01***	1.0	0.67	8.0E-02	***2.0E-01***	0.33	4.0E-02	0.015	1.0	1.7E-01	8.0E-01	8.0E+00	2.2E-01	2.2E-02
Cadmium	7.6E-01	0.0012	1.0	5.9E-02	0.0090	1.1E+00	1.0	0.67	4.4E-01	3.6E-01	0.33	7.1E-02	0.015	1.0	5.7E-01	5.8E+00	5.8E+01	9.8E-02	9.8E-03
Chromium	1.7E+01	0.0012	1.0	1.3E+00	0.0090	1.3E+00	1.0	0.67	5.2E-01	2.0E-01	0.33	4.0E-02	0.015	1.0	1.9E+00	4.0E+00	1.6E+01	4.8E-01	1.2E-01
Cobalt	1.5E+01	0.0012	1.0	1.2E+00	0.0090	1.5E+00	1.0	0.67	6.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	1.9E+00	6.0E-02	6.0E-01	3.1E+01	3.1E+00
Copper	2.5E+01	0.0012	1.0	2.0E+00	0.0090	3.7E+00	1.0	0.67	1.5E+00	2.0E+01	0.33	4.0E+00	0.015	1.0	7.4E+00	1.5E+01	2.0E+01	4.9E-01	3.7E-01
Lead	3.3E+01	0.0012	1.0	2.6E+00	0.0090	2.4E+00	1.0	0.67	9.6E-01	1.0E+00	0.33	2.0E-01	0.015	1.0	3.7E+00	9.7E+00	9.7E+01	3.9E-01	3.9E-02
Manganese	1.2E+03	0.0012	1.0	9.4E+01	0.0090	3.7E+01	1.0	0.67	1.5E+01	5.5E+00	0.33	1.1E+00	0.015	1.0	1.1E+02	1.1E+02	3.4E+02	1.0E+00	3.2E-01
Mercury	7.6E-02	0.0012	1.0	5.9E-03	0.0090	3.0E-02	1.0	0.67	1.2E-02	1.3E-01	0.33	2.6E-02	0.015	1.0	4.4E-02	9.9E-02	4.9E-01	4.4E-01	8.8E-02
Nickel	2.1E+01	0.0012	1.0	1.6E+00	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***2.0E+00***	0.33	4.0E-01	0.015	1.0	2.8E+00	4.8E+01	9.7E+01	5.9E-02	2.9E-02
Selenium	***5.5E-01***	0.0012	1.0	4.3E-02	0.0090	7.0E-01	1.0	0.67	2.8E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	4.2E-01	1.9E-01	3.2E-01	2.2E+00	1.3E+00
Silver	***5.5E-01***	0.0012	1.0	4.3E-02	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.4E-01	1.9E-01	1.9E+00	1.8E+00	1.8E-01
Thallium	***5.5E-01***	0.0012	1.0	4.3E-02	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.4E-01	1.4E-02	1.4E-01	2.5E+01	2.5E+00
Vanadium	3.4E+01	0.0012	1.0	2.7E+00	0.0090	2.3E+00	1.0	0.67	9.2E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.7E+00	1.1E-01	1.1E+00	3.3E+01	3.3E+00
Zinc	1.2E+02	0.0012	1.0	9.4E+00	0.0090	2.9E+01	1.0	0.67	1.2E+01	5.6E+01	0.33	1.1E+01	0.015	1.0	3.2E+01	2.6E+02	5.1E+02	1.3E-01	6.3E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

Table 7-41
COPECs for Site R
Sauget, IL

Soil HQs	Short-tailed Shrew Modeling HQs (Average Conc.)	Short-tailed Shrew Modeling HQs (Maximum Conc.)	Prairie Vole Modeling HQs (Average Conc.)	Prairie Vole Modeling HQs (Maximum Conc.)
Tetrachloroethene	Dichloroprop (NOAEL only)	MCPP	Aluminum	Cobalt (NOAEL only)
Trichloroethylene	MCPP	Dioxins/furans	Cobalt (NOAEL only)	Mercury (NOAEL only)
Aluminum	Dioxins/furans	Cobalt	Mercury (NOAEL only)	Vanadium (NOAEL only)
Chromium	Aluminum	Manganese (NOAEL only)	Vanadium (NOAEL only)	
Iron	Antimony (NOAEL only)	Selenium		
Manganese	Cobalt	Vanadium		
Vanadium	Vanadium			

NOTES:
Analytes listed are only for those exceeding their benchmark/TRV, based on detected values, and were above the background values.
Shaded entries are for those compounds that are COPECs for all receptors and all concentrations.

Table 7-42
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site O (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	1.8E-01	0.00012	1.0	5.0E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	6.2E+01	2.9E-03	8.1E-04
1,2-Dichlorobenzene	2.7E-01	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.4E+03	5.1E-04	3.6E-05
1,3-Dichlorobenzene	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.4E+03	5.1E-04	3.6E-05
1,4-Dichlorobenzene	2.3E-01	0.00012	1.0	6.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.7E+02	5.1E-04	2.9E-04
2,2'-Oxybis(1-Chloropropane)	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
2,4,5-Trichlorophenol	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	3.5E+01	4.3E-03	1.4E-03
2,4,6-Trichlorophenol	3.0E-01	0.00012	1.0	8.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.8E+02	3.5E+01	8.7E-05	1.5E-03
2,4-Dichlorophenol	2.6E-01	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.5E-01	3.5E+00	1.4E-01	1.4E-02
2,4-Dinitrophenol	***1.3E+00***	0.00012	1.0	3.9E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	1.6E-03	1.6E-02	1.7E+02	1.7E+01
2,4-Dinitrotoluene	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.9E-01	2.2E+00	1.8E-01	2.3E-02
2,6-Dinitrotoluene	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	8.1E-01	8.1E+00	6.2E-02	6.2E-03
2-Chloronaphthalene	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.5E+01	6.0E+01	2.0E-03	8.4E-04
2-Chlorophenol	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.8E+01	5.8E+00	8.7E-04	8.7E-03
2-Methylnaphthalene	2.2E-01	0.00012	1.0	6.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.8E+03	2.8E+04	1.8E-05	1.8E-06
2-Methylphenol (o-Cresol)	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
2-Nitroaniline	8.1E-01	0.00012	1.0	2.3E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
2-Nitrophenol	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.9E+00	8.1E+00	1.7E-02	6.2E-03
3,3'-Dichlorobenzidine	***5.2E-01***	0.00012	1.0	1.5E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.5E+01	5.1E+02	6.8E-03	2.0E-04
3/4-Methylphenol (m&p-Cresol)	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
3-Nitroaniline	***1.3E+00***	0.00012	1.0	3.9E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4,6-Dinitro-2-methylphenol	***1.3E+00***	0.00012	1.0	3.9E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E-01	5.3E+00	9.0E-01	4.9E-02
4-Bromophenyl Phenyl Ether	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+00	9.2E+00	4.3E-02	5.4E-03
4-Chloro-3-methylphenol	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.3E+02	1.3E+03	3.9E-04	3.9E-05
4-Chloroaniline	4.9E-01	0.00012	1.0	1.4E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.4E+00	1.4E+01	7.0E-02	7.0E-03
4-Chlorophenyl Phenyl Ether	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+00	9.2E+00	4.3E-02	5.4E-03
4-Nitroaniline	1.0E+00	0.00012	1.0	2.9E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4-Nitrophenol	***1.3E+00***	0.00012	1.0	3.9E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E+00	8.1E+00	9.0E-02	3.2E-02
Acenaphthene	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Acenaphthylene	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Anthracene	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+02	1.0E+03	5.0E-04	5.0E-05
Benzo(a)anthracene	2.2E-01	0.00012	1.0	6.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(a)pyrene	2.4E-01	0.00012	1.0	6.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(b)fluoranthene	2.5E-01	0.00012	1.0	7.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(g,h,i)perylene	4.3E-01	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.0E+00	1.0E+01	5.1E-02	5.1E-03
Benzo(k)fluoranthene	2.7E-01	0.00012	1.0	7.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
bis(2-Chloroethoxy)methane	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
bis(2-Chloroethyl)ether	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
bis(2-Ethylhexyl)phthalate	3.2E-01	0.00012	1.0	9.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.9E+01	1.9E+02	2.7E-03	2.7E-04
Butyl Benzyl Phthalate	1.1E+01	0.00012	1.0	3.1E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	8.1E-02	1.8E+01	5.4E+01	4.4E-03	1.5E-03
Carbazole	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.0E+00	3.0E+01	1.7E-02	1.7E-03
Chrysene	2.8E-01	0.00012	1.0	8.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Dibenzo(a,h)anthracene	2.4E-01	0.00012	1.0	7.1E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Dibenzofuran	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.5E-02	1.5E-01	3.3E+00	3.3E-01
Diethyl Phthalate	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.5E+03	4.5E+04	1.1E-05	1.1E-06
Dimethyl Phthalate	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.6E+03	4.6E+04	1.1E-05	1.1E-06
Di-n-butylphthalate	2.4E-01	0.00012	1.0	6.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.6E+02	1.9E+03	9.0E-05	2.7E-05
Di-n-octylphthalate	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.5E+02	1.8E+03	9.2E-05	2.7E-05
Fluoranthene	2.2E-01	0.00012	1.0	6.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	2.5E+01	4.0E-03	2.0E-03
Fluorene	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	2.5E+01	4.0E-03	2.0E-03
Hexachlorobenzene	2.4E-01	0.00012	1.0	7.0E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.2E-02	3.4E-01	5.4E-01	1.5E-01
Hexachlorobutadiene	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.3E-01	2.3E-01	2.2E-01	2.2E-01
Hexachlorocyclopentadiene	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	6.9E-01	1.3E+00	7.2E-02	4.0E-02
Hexachloroethane	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E-01	1.7E+00	4.3E-01	2.9E-02
Indeno(1,2,3-cd)pyrene	2.5E-01	0.00012	1.0	7.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Isophorone	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.2E+01	2.1E+02	2.3E-03	2.4E-04
Naphthalene	2.5E-01	0.00012	1.0	7.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	8.2E+00	1.6E+01	6.1E-03	3.1E-03
Nitrobenzene	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.6E-02	4.6E-01	1.1E+00	1.1E-01
N-Nitroso-di-n-propylamine	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E-02	1.0E-01	5.0E+00	5.0E-01
N-Nitrosodiphenylamine	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.3E+02	5.8E+01	2.2E-04	8.7E-04
Pentachlorophenol	4.4E+01	0.00012	1.0	1.3E-01	0.0042	***6.0E-02***	1.0	6.0E-03	0.0416	1.0	1.3E-01	3.7E-01	3.7E+00	3.5E-01	3.5E-02
Phenanthrene	2.1E-01	0.00012	1.0	6.0E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Phenol	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	6.9E+01	1.4E+02	7.2E-04	3.6E-04
Pyrene	2.6E-01	0.00012	1.0	7.4E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	7.5E+00	1.2E+01	6.7E-03	4.0E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-42
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site O (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	3.0E-02	0.00012	1.0	8.6E-05	0.0042	4.1E-03	1.0	4.1E-04	0.0416	1.0	5.0E-04	4.2E-01	2.1E+00	1.2E-03	2.4E-04
4,4'-DDE	***7.7E-03***	0.00012	1.0	2.2E-05	0.0042	6.6E-03	1.0	6.6E-04	0.0416	1.0	6.9E-04	4.2E-01	2.1E+00	1.6E-03	3.3E-04
4,4'-DDT	7.8E-02	0.00012	1.0	2.2E-04	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	7.2E-04	4.2E-01	2.1E+00	1.7E-03	3.4E-04
Aldrin	***4.0E-03***	0.00012	1.0	1.1E-05	0.0042	3.4E-03	1.0	3.4E-04	0.0416	1.0	3.5E-04	2.8E-01	1.4E+00	1.2E-03	2.5E-04
alpha-BHC	***4.0E-03***	0.00012	1.0	1.1E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.7E-04	2.3E+00	4.5E+00	1.2E-04	5.9E-05
alpha-Chlordane	3.8E-03	0.00012	1.0	1.1E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.7E-04	4.6E+00	9.1E+00	5.8E-05	2.9E-05
beta-BHC	***4.0E-03***	0.00012	1.0	1.1E-05	0.0042	3.2E-03	1.0	3.2E-04	0.0416	1.0	3.3E-04	5.7E-01	2.8E+00	5.8E-04	1.2E-04
delta-BHC	***4.0E-03***	0.00012	1.0	1.1E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.7E-04	2.3E+00	4.5E+00	1.2E-04	5.9E-05
Dieldrin	6.1E-02	0.00012	1.0	1.8E-04	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	6.7E-04	1.8E-02	1.8E-01	3.8E-02	3.8E-03
Endosulfan I	***4.0E-03***	0.00012	1.0	1.1E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.7E-04	4.3E-01	4.3E+00	6.2E-04	6.2E-05
Endosulfan II	4.9E-03	0.00012	1.0	1.4E-05	0.0042	5.1E-03	1.0	5.1E-04	0.0416	1.0	5.2E-04	4.3E-01	4.3E+00	1.2E-03	1.2E-04
Endosulfan Sulfate	5.8E-02	0.00012	1.0	1.7E-04	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	6.6E-04	4.3E-01	4.3E+00	1.5E-03	1.5E-04
Endrin	***7.7E-03***	0.00012	1.0	2.2E-05	0.0042	4.0E-03	1.0	4.0E-04	0.0416	1.0	4.2E-04	9.2E-02	9.2E-01	4.6E-03	4.6E-04
Endrin Aldehyde	8.2E-03	0.00012	1.0	2.4E-05	0.0042	1.2E-02	1.0	1.2E-03	0.0416	1.0	1.2E-03	9.2E-02	9.2E-01	1.3E-02	1.3E-03
Endrin Ketone	8.6E-03	0.00012	1.0	2.5E-05	0.0042	4.0E-03	1.0	4.0E-04	0.0416	1.0	4.3E-04	9.2E-02	9.2E-01	4.7E-03	4.7E-04
gamma-BHC (Lindane)	1.1E-02	0.00012	1.0	3.3E-05	0.0042	5.1E-03	1.0	5.1E-04	0.0416	1.0	5.4E-04	2.0E+01	2.0E+02	2.7E-05	2.7E-06
gamma-Chlordane	6.0E-02	0.00012	1.0	1.7E-04	0.0042	3.6E-03	1.0	3.6E-04	0.0416	1.0	5.3E-04	4.6E+00	9.1E+00	1.2E-04	5.8E-05
Heptachlor	6.0E-03	0.00012	1.0	1.7E-05	0.0042	2.8E-03	1.0	2.8E-04	0.0416	1.0	3.0E-04	7.4E-02	7.4E-01	4.0E-03	4.0E-04
Heptachlor Epoxide	***4.0E-03***	0.00012	1.0	1.1E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.7E-04	1.0E-03	7.5E-03	2.6E-01	3.6E-02
Methoxychlor	3.7E-02	0.00012	1.0	1.1E-04	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	2.7E-03	2.3E+00	4.7E+00	1.1E-03	5.7E-04
Toxaphene	***4.0E-01***	0.00012	1.0	1.1E-03	0.0042	***2.6E-01***	1.0	2.6E-02	0.0416	1.0	2.7E-02	7.9E+00	7.9E+01	3.4E-03	3.4E-04
Herbicides															
2,4-D	1.1E+00	0.00012	1.0	3.1E-03	0.0042	5.2E-02	1.0	5.2E-03	0.0416	1.0	8.2E-03	1.6E+00	8.1E+00	5.1E-03	1.0E-03
2,4-DB	1.1E+00	0.00012	1.0	3.1E-03	0.0042	4.4E-01	1.0	4.4E-02	0.0416	1.0	4.7E-02	2.6E+00	8.3E+00	1.8E-02	5.7E-03
2,4,5-T	1.1E+00	0.00012	1.0	3.1E-03	0.0042	***2.8E-02***	1.0	2.8E-03	0.0416	1.0	5.9E-03	3.5E+00	1.2E+01	1.7E-03	5.1E-04
2,4,5-TP (Silvex)	***1.1E+00***	0.00012	1.0	3.0E-03	0.0042	***2.8E-02***	1.0	2.8E-03	0.0416	1.0	5.9E-03	1.1E+00	3.6E+00	5.5E-03	1.6E-03
Dalapon	***4.2E+01***	0.00012	1.0	1.2E-01	0.0042	***7.0E+00***	1.0	7.0E-01	0.0416	1.0	8.2E-01	9.8E+00	3.3E+01	8.4E-02	2.5E-02
Dicamba	1.1E+00	0.00012	1.0	3.1E-03	0.0042	***7.0E-02***	1.0	7.0E-03	0.0416	1.0	1.0E-02	3.7E+00	1.2E+01	2.7E-03	8.1E-04
Dichlorprop	1.3E+01	0.00012	1.0	3.7E-02	0.0042	3.7E-01	1.0	3.7E-02	0.0416	1.0	7.3E-02	2.0E-01	2.0E+00	3.7E-01	3.7E-02
Dinoseb	***2.6E-01***	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E-01	1.2E+00	4.3E-01	4.3E-02
MCPA	***2.5E+02***	0.00012	1.0	7.2E-01	0.0042	7.9E+00	1.0	7.9E-01	0.0416	1.0	1.5E+00	2.2E-01	1.1E+00	7.0E+00	1.4E+00
MCPP	2.6E+02	0.00012	1.0	7.4E-01	0.0042	***7.0E+00***	1.0	7.0E-01	0.0416	1.0	1.4E+00	3.5E-01	1.0E+00	4.1E+00	1.4E+00
PCBs															
Total PCBs	2.4E+02	0.00012	1.0	6.9E-01	0.0042	***2.5E-02***	1.0	2.5E-03	0.0416	1.0	6.9E-01	1.2E-01	1.2E+00	6.0E+00	6.0E-01
Dioxins/Furans															
TEQ	1.9E-02	0.00012	1.0	5.5E-05	0.0042	1.8E-06	1.0	1.8E-07	0.0416	1.0	5.5E-05	1.2E-06	1.2E-05	4.7E+01	4.7E+00
Metals*															
Aluminum	7.6E+03	0.00012	1.0	2.2E+01	0.0042	9.9E+00	1.0	9.9E-01	0.0416	1.0	2.3E+01	1.9E+00	1.9E+01	1.2E+01	1.2E+00
Antimony	9.8E-01	0.00012	1.0	2.8E-03	0.0042	***9.3E-01***	1.0	9.3E-02	0.0416	1.0	9.6E-02	1.2E-01	1.2E+00	7.7E-01	7.7E-02
Arsenic	7.5E+00	0.00012	1.0	2.2E-02	0.0042	***4.7E-01***	1.0	4.7E-02	0.0416	1.0	6.9E-02	1.3E-01	1.3E+00	5.5E-01	5.5E-02
Barium	2.2E+02	0.00012	1.0	6.4E-01	0.0042	5.1E+00	1.0	5.1E-01	0.0416	1.0	1.1E+00	9.4E+00	3.7E+01	1.2E-01	3.1E-02
Beryllium	5.0E-01	0.00012	1.0	1.4E-03	0.0042	***1.9E-01***	1.0	1.9E-02	0.0416	1.0	2.0E-02	7.6E-01	7.6E+00	2.6E-02	2.6E-03
Cadmium	7.6E+00	0.00012	1.0	2.2E-02	0.0042	1.5E-01	1.0	1.5E-02	0.0416	1.0	3.7E-02	3.9E+00	3.9E+01	9.6E-03	9.6E-04
Chromium	1.7E+01	0.00012	1.0	4.8E-02	0.0042	3.3E-01	1.0	3.3E-02	0.0416	1.0	8.1E-02	3.8E+00	1.5E+01	2.1E-02	5.3E-03
Cobalt	6.2E+00	0.00012	1.0	1.8E-02	0.0042	***4.7E-01***	1.0	4.7E-02	0.0416	1.0	6.5E-02	5.8E-02	5.8E-01	1.1E+00	1.1E-01
Copper	1.7E+02	0.00012	1.0	4.8E-01	0.0042	3.8E+00	1.0	3.8E-01	0.0416	1.0	8.6E-01	1.4E+01	1.9E+01	6.0E-02	4.5E-02
Lead	7.3E+01	0.00012	1.0	2.1E-01	0.0042	9.3E-01	1.0	9.3E-02	0.0416	1.0	3.0E-01	9.2E+00	9.2E+01	3.3E-02	3.3E-03
Manganese	3.7E+02	0.00012	1.0	1.1E+00	0.0042	1.1E+01	1.0	1.1E+00	0.0416	1.0	2.2E+00	1.0E+02	3.3E+02	2.1E-02	6.6E-03
Mercury	3.6E+01	0.00012	1.0	1.0E-01	0.0042	4.1E-01	1.0	4.1E-02	0.0416	1.0	1.4E-01	7.6E-02	3.8E-01	1.9E+00	3.8E-01
Nickel	3.0E+01	0.00012	1.0	8.5E-02	0.0042	***1.9E+00***	1.0	1.9E-01	0.0416	1.0	2.7E-01	4.6E+01	9.2E+01	5.9E-03	2.9E-03
Selenium	2.2E+00	0.00012	1.0	6.3E-03	0.0042	***4.7E-01***	1.0	4.7E-02	0.0416	1.0	5.3E-02	1.9E-01	3.2E-01	2.8E-01	1.7E-01
Silver	1.6E+00	0.00012	1.0	4.6E-03	0.0042	***4.7E-01***	1.0	4.7E-02	0.0416	1.0	5.2E-02	1.8E-01	1.8E+00	2.9E-01	2.9E-02
Thallium	***1.2E+00***	0.00012	1.0	3.4E-03	0.0042	***4.7E-01***	1.0	4.7E-02	0.0416	1.0	5.0E-02	1.2E-02	1.2E-01	4.3E+00	4.3E-01
Vanadium	2.4E+01	0.00012	1.0	6.9E-02	0.0042	***4.7E-01***	1.0	4.7E-02	0.0416	1.0	1.2E-01	1.3E-01	1.3E+00	8.9E-01	8.9E-02
Zinc	5.5E+02	0.00012	1.0	1.6E+00	0.0042	2.2E+01	1.0	2.2E+00	0.0416	1.0	3.7E+00	2.3E+02	4.6E+02	1.6E-02	8.2E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-43
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site O (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	2.2E-01	0.00012	1.0	6.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	6.2E+01	2.9E-03	8.1E-04
1,2-Dichlorobenzene	1.1E+00	0.00012	1.0	3.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	9.9E+01	1.4E+03	5.3E-04	3.8E-05
1,3-Dichlorobenzene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	9.9E+01	1.4E+03	5.3E-04	3.8E-05
1,4-Dichlorobenzene	6.3E-01	0.00012	1.0	1.8E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	9.9E+01	1.7E+02	5.2E-04	3.0E-04
2,2'-Oxybis(1-Chloropropane)	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	3.6E+01	2.0E+02	1.5E-03	2.7E-04
2,4,5-Trichlorophenol	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E+01	3.5E+01	4.5E-03	1.5E-03
2,4,6-Trichlorophenol	1.3E+00	0.00012	1.0	3.8E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	5.8E+02	3.5E+01	9.2E-05	1.5E-03
2,4-Dichlorophenol	9.4E-01	0.00012	1.0	2.7E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	3.5E-01	3.5E+00	1.5E-01	1.5E-02
2,4-Dinitrophenol	***5.0E+00***	0.00012	1.0	1.4E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.7E-01	1.6E-03	1.6E-02	1.7E+02	1.7E+01
2,4-Dinitrotoluene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.9E-01	2.2E+00	1.8E-01	2.4E-02
2,6-Dinitrotoluene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	8.1E-01	8.1E+00	6.5E-02	6.5E-03
2-Chloronaphthalene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.5E+01	6.0E+01	2.1E-03	8.8E-04
2-Chlorophenol	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	5.8E+01	5.8E+00	9.1E-04	9.1E-03
2-Methylnaphthalene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.8E+03	2.8E+04	1.8E-05	1.8E-06
2-Methylphenol (o-Cresol)	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
2-Nitroaniline	***1.1E+00***	0.00012	1.0	3.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
2-Nitrophenol	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.9E+00	8.1E+00	1.8E-02	6.5E-03
3,3'-Dichlorobenzidine	***2.0E+00***	0.00012	1.0	5.6E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.1E-01	1.5E+01	5.1E+02	7.1E-03	2.1E-04
3/4-Methylphenol (m&p-Cresol)	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
3-Nitroaniline	***5.0E+00***	0.00012	1.0	1.4E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.7E-01	4.9E+00	4.9E+01	5.5E-02	5.5E-03
4,6-Dinitro-2-methylphenol	***5.0E+00***	0.00012	1.0	1.4E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.7E-01	2.9E-01	5.3E+00	9.3E-01	5.1E-02
4-Bromophenyl Phenyl Ether	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E+00	9.2E+00	4.5E-02	5.7E-03
4-Chloro-3-methylphenol	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.3E+02	1.3E+03	4.0E-04	4.0E-05
4-Chloroaniline	***2.0E+00***	0.00012	1.0	5.6E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.1E-01	1.4E+00	1.4E+01	7.3E-02	7.3E-03
4-Chlorophenyl Phenyl Ether	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E+00	9.2E+00	4.5E-02	5.7E-03
4-Nitroaniline	1.2E+00	0.00012	1.0	3.5E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4-Nitrophenol	***5.0E+00***	0.00012	1.0	1.4E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.7E-01	2.9E+00	8.1E+00	9.3E-02	3.3E-02
Acenaphthene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.7E+01	3.5E+01	3.0E-03	1.5E-03
Acenaphthylene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.7E+01	3.5E+01	3.0E-03	1.5E-03
Anthracene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+02	1.0E+03	5.3E-04	5.3E-05
Benzo(a)anthracene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.3E-02	5.3E-03
Benzo(a)pyrene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.3E-02	5.3E-03
Benzo(b)fluoranthene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.3E-02	5.3E-03
Benzo(g,h,i)perylene	1.0E-03	0.00012	1.0	2.9E-06	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Benzo(k)fluoranthene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.3E-02	5.3E-03
bis(2-Chloroethoxy)methane	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	3.6E+01	2.0E+02	1.5E-03	2.7E-04
bis(2-Chloroethyl)ether	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	3.6E+01	2.0E+02	1.5E-03	2.7E-04
bis(2-Ethylhexyl)phthalate	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.9E+01	1.9E+02	2.8E-03	2.8E-04
Butyl Benzyl Phthalate	7.9E+01	0.00012	1.0	2.3E-01	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	2.8E-01	1.8E+01	5.4E+01	1.5E-02	5.1E-03
Carbazole	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	3.0E+00	3.0E+01	1.8E-02	1.8E-03
Chrysene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.3E-02	5.3E-03
Dibenzo(a,h)anthracene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.3E-02	5.3E-03
Dibenzofuran	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.5E-02	1.5E-01	3.4E+00	3.4E-01
Diethyl Phthalate	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	4.5E+03	4.5E+04	1.2E-05	1.2E-06
Dimethyl Phthalate	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	4.6E+03	4.6E+04	1.1E-05	1.1E-06
Di-n-butylphthalate	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	5.6E+02	1.9E+03	9.4E-05	2.8E-05
Di-n-octylphthalate	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	5.5E+02	1.8E+03	9.5E-05	2.9E-05
Fluoranthene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E+01	2.5E+01	4.2E-03	2.1E-03
Fluorene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E+01	2.5E+01	4.2E-03	2.1E-03
Hexachlorobenzene	5.1E-01	0.00012	1.0	1.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	9.2E-02	3.4E-01	5.5E-01	1.5E-01
Hexachlorobutadiene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.3E-01	2.3E-01	2.3E-01	2.3E-01
Hexachlorocyclopentadiene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	6.9E-01	1.3E+00	7.6E-02	4.1E-02
Hexachloroethane	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E-01	1.7E+00	4.5E-01	3.0E-02
Indeno(1,2,3-cd)pyrene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.3E-02	5.3E-03
Isophorone	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.2E+01	2.1E+02	2.4E-03	2.5E-04
Naphthalene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	8.2E+00	1.6E+01	6.4E-03	3.2E-03
Nitrobenzene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	4.6E-02	4.6E-01	1.1E+00	1.1E-01
N-Nitroso-di-n-propylamine	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E-02	1.0E-01	5.3E+00	5.3E-01
N-Nitrosodiphenylamine	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	2.3E+02	5.8E+01	2.3E-04	9.1E-04
Pentachlorophenol	4.8E+02	0.00012	1.0	1.4E+00	0.0042	***1.3E-01***	1.0	1.3E-02	0.0416	1.0	1.4E+00	3.7E-01	3.7E+00	3.7E+00	3.7E-01
Phenanthrene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.7E+01	3.5E+01	3.0E-03	1.5E-03
Phenol	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	6.9E+01	1.4E+02	7.6E-04	3.8E-04
Pyrene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	7.5E+00	1.2E+01	7.0E-03	4.2E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workpla
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-43
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site O (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	8.6E-02	0.00012	1.0	2.5E-04	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	7.4E-04	4.2E-01	2.1E+00	1.8E-03	3.5E-04
4,4'-DDE	***2.0E-02***	0.00012	1.0	5.6E-05	0.0042	1.0E-02	1.0	1.0E-03	0.0416	1.0	1.1E-03	4.2E-01	2.1E+00	2.5E-03	5.0E-04
4,4'-DDT	2.3E-01	0.00012	1.0	6.6E-04	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	1.2E-03	4.2E-01	2.1E+00	2.8E-03	5.5E-04
Aldrin	***1.0E-02***	0.00012	1.0	2.9E-05	0.0042	5.1E-03	1.0	5.1E-04	0.0416	1.0	5.4E-04	2.8E-01	1.4E+00	1.9E-03	3.8E-04
alpha-BHC	***1.0E-02***	0.00012	1.0	2.9E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.8E-04	2.3E+00	4.5E+00	1.3E-04	6.3E-05
alpha-Chlordane	9.4E-03	0.00012	1.0	2.7E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.8E-04	4.6E+00	9.1E+00	6.2E-05	3.1E-05
beta-BHC	***1.0E-02***	0.00012	1.0	2.9E-05	0.0042	4.4E-03	1.0	4.4E-04	0.0416	1.0	4.7E-04	5.7E-01	2.8E+00	8.3E-04	1.7E-04
delta-BHC	***1.0E-02***	0.00012	1.0	2.9E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.8E-04	2.3E+00	4.5E+00	1.3E-04	6.3E-05
Dieldrin	1.8E-01	0.00012	1.0	5.2E-04	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	1.0E-03	1.8E-02	1.8E-01	5.8E-02	5.8E-03
Endosulfan I	***1.0E-02***	0.00012	1.0	2.9E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.8E-04	4.3E-01	4.3E+00	6.6E-04	6.6E-05
Endosulfan II	1.1E-02	0.00012	1.0	3.2E-05	0.0042	5.4E-03	1.0	5.4E-04	0.0416	1.0	5.7E-04	4.3E-01	4.3E+00	1.3E-03	1.3E-04
Endosulfan Sulfate	1.7E-01	0.00012	1.0	4.9E-04	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	9.9E-04	4.3E-01	4.3E+00	2.3E-03	2.3E-04
Endrin	***2.0E-02***	0.00012	1.0	5.6E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.5E-04	9.2E-02	9.2E-01	6.0E-03	6.0E-04
Endrin Aldehyde	***2.0E-02***	0.00012	1.0	5.6E-05	0.0042	2.5E-02	1.0	2.5E-03	0.0416	1.0	2.6E-03	9.2E-02	9.2E-01	2.8E-02	2.8E-03
Endrin Ketone	2.2E-02	0.00012	1.0	6.3E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.6E-04	9.2E-02	9.2E-01	6.1E-03	6.1E-04
gamma-BHC (Lindane)	3.2E-02	0.00012	1.0	9.2E-05	0.0042	9.8E-03	1.0	9.8E-04	0.0416	1.0	1.1E-03	2.0E+01	2.0E+02	5.3E-05	5.3E-06
gamma-Chlordane	1.8E-01	0.00012	1.0	5.2E-04	0.0042	5.7E-03	1.0	5.7E-04	0.0416	1.0	1.1E-03	4.6E+00	9.1E+00	2.4E-04	1.2E-04
Heptachlor	1.6E-02	0.00012	1.0	4.6E-05	0.0042	3.4E-03	1.0	3.4E-04	0.0416	1.0	3.9E-04	7.4E-02	7.4E-01	5.2E-03	5.2E-04
Heptachlor Epoxide	***1.0E-02***	0.00012	1.0	2.9E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.8E-04	1.0E-03	7.5E-03	2.8E-01	3.8E-02
Methoxychlor	***1.0E-01***	0.00012	1.0	2.9E-04	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	2.8E-03	2.3E+00	4.7E+00	1.2E-03	6.1E-04
Toxaphene	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***2.6E-01***	1.0	2.6E-02	0.0416	1.0	2.8E-02	7.9E+00	7.9E+01	3.6E-03	3.6E-04
Herbicides															
2,4-D	***1.0E+01***	0.00012	1.0	2.9E-02	0.0042	1.1E-01	1.0	1.1E-02	0.0416	1.0	4.0E-02	1.6E+00	8.1E+00	2.5E-02	4.9E-03
2,4-DB	***1.0E+01***	0.00012	1.0	2.9E-02	0.0042	1.3E+00	1.0	1.3E-01	0.0416	1.0	1.6E-01	2.6E+00	8.3E+00	6.0E-02	1.9E-02
2,4,5-T	***1.0E+01***	0.00012	1.0	2.9E-02	0.0042	***6.0E-02***	1.0	6.0E-03	0.0416	1.0	3.5E-02	3.5E+00	1.2E+01	1.0E-02	3.0E-03
2,4,5-TP (Silvex)	***1.0E+01***	0.00012	1.0	2.9E-02	0.0042	***6.0E-02***	1.0	6.0E-03	0.0416	1.0	3.5E-02	1.1E+00	3.6E+00	3.2E-02	9.7E-03
Dalapon	***3.9E+02***	0.00012	1.0	1.1E+00	0.0042	***1.5E+01***	1.0	1.5E+00	0.0416	1.0	2.6E+00	9.8E+00	3.3E+01	2.7E-01	7.9E-02
Dicamba	***1.0E+01***	0.00012	1.0	2.9E-02	0.0042	***1.5E-01***	1.0	1.5E-02	0.0416	1.0	4.4E-02	3.7E+00	1.2E+01	1.2E-02	3.5E-03
Dichlorprop	***1.2E+02***	0.00012	1.0	3.5E-01	0.0042	***7.5E-01***	1.0	7.5E-02	0.0416	1.0	4.2E-01	2.0E-01	2.0E+00	2.1E+00	2.1E-01
Dinoseb	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E-01	1.2E+00	4.5E-01	4.5E-02
MCPA	***2.4E+03***	0.00012	1.0	6.8E+00	0.0042	***1.5E+01***	1.0	1.5E+00	0.0416	1.0	8.3E+00	2.2E-01	1.1E+00	3.8E+01	7.7E+00
MCPP	***2.4E+03***	0.00012	1.0	6.8E+00	0.0042	***1.5E+01***	1.0	1.5E+00	0.0416	1.0	8.3E+00	3.5E-01	1.0E+00	2.4E+01	8.0E+00
PCBs															
Total PCBs	7.1E+02	0.00012	1.0	2.0E+00	0.0042	***2.5E-02***	1.0	2.5E-03	0.0416	1.0	2.0E+00	1.2E-01	1.2E+00	1.8E+01	1.8E+00
Dioxins/Furans															
TEQ	5.1E-02	0.00012	1.0	1.5E-04	0.0042	4.3E-06	1.0	4.3E-07	0.0416	1.0	1.5E-04	1.2E-06	1.2E-05	1.3E+02	1.3E+01
Metals*															
Aluminum	1.1E+04	0.00012	1.0	3.2E+01	0.0042	1.4E+01	1.0	1.4E+00	0.0416	1.0	3.3E+01	1.9E+00	1.9E+01	1.7E+01	1.7E+00
Antimony	1.6E+00	0.00012	1.0	4.6E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.2E-01	1.2E+00	8.4E-01	8.4E-02
Arsenic	1.1E+01	0.00012	1.0	3.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	8.2E-02	1.3E-01	1.3E+00	6.5E-01	6.5E-02
Barium	5.4E+02	0.00012	1.0	1.6E+00	0.0042	7.6E+00	1.0	7.6E-01	0.0416	1.0	2.3E+00	9.4E+00	3.7E+01	2.5E-01	6.3E-02
Beryllium	7.5E-01	0.00012	1.0	2.2E-03	0.0042	***2.0E-01***	1.0	2.0E-02	0.0416	1.0	2.2E-02	7.6E-01	7.6E+00	2.9E-02	2.9E-03
Cadmium	3.2E+01	0.00012	1.0	9.2E-02	0.0042	2.0E-01	1.0	2.0E-02	0.0416	1.0	1.1E-01	3.9E+00	3.9E+01	2.9E-02	2.9E-03
Chromium	4.2E+01	0.00012	1.0	1.2E-01	0.0042	***4.6E-01***	1.0	4.6E-02	0.0416	1.0	1.7E-01	3.8E+00	1.5E+01	4.4E-02	1.1E-02
Cobalt	7.4E+00	0.00012	1.0	2.1E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.1E-02	5.8E-02	5.8E-01	1.2E+00	1.2E-01
Copper	6.8E+02	0.00012	1.0	2.0E+00	0.0042	4.0E+00	1.0	4.0E-01	0.0416	1.0	2.4E+00	1.4E+01	1.9E+01	1.6E-01	1.2E-01
Lead	1.7E+02	0.00012	1.0	4.9E-01	0.0042	1.4E+00	1.0	1.4E-01	0.0416	1.0	6.3E-01	9.2E+00	9.2E+01	6.8E-02	6.8E-03
Manganese	5.6E+02	0.00012	1.0	1.6E+00	0.0042	1.2E+01	1.0	1.2E+00	0.0416	1.0	2.8E+00	1.0E+02	3.3E+02	2.8E-02	8.6E-03
Mercury	1.8E+02	0.00012	1.0	5.2E-01	0.0042	9.1E-01	1.0	9.1E-02	0.0416	1.0	6.1E-01	7.6E-02	3.8E-01	8.0E+00	1.6E+00
Nickel	1.4E+02	0.00012	1.0	4.0E-01	0.0042	***2.0E+00***	1.0	2.0E-01	0.0416	1.0	6.0E-01	4.6E+01	9.2E+01	1.3E-02	6.5E-03
Selenium	1.0E+01	0.00012	1.0	2.9E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.9E-02	1.9E-01	3.2E-01	4.1E-01	2.5E-01
Silver	4.2E+00	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.8E-01	1.8E+00	3.4E-01	3.4E-02
Thallium	***1.5E+00***	0.00012	1.0	4.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.4E-02	1.2E-02	1.2E-01	4.6E+00	4.6E-01
Vanadium	2.9E+01	0.00012	1.0	8.4E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.3E-01	1.3E-01	1.3E+00	1.0E+00	1.0E-01
Zinc	2.4E+03	0.00012	1.0	6.9E+00	0.0042	2.5E+01	1.0	2.5E+00	0.0416	1.0	9.4E+00	2.3E+02	4.6E+02	4.1E-02	2.1E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-44
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site O (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs																(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	1.8E-01	0.0012	1.0	1.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.1E-01	1.8E+01	6.5E+01	2.9E-02	7.9E-03
1,2-Dichlorobenzene	2.7E-01	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+02	1.4E+03	5.0E-03	3.6E-04
1,3-Dichlorobenzene	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+02	1.4E+03	5.0E-03	3.6E-04
1,4-Dichlorobenzene	2.3E-01	0.0012	1.0	1.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+02	1.8E+02	5.0E-03	2.9E-03
2,2'-Oxybis(1-Chloropropane)	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
2,4,5-Trichlorophenol	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.2E+01	3.6E+01	4.3E-02	1.4E-02
2,4,6-Trichlorophenol	3.0E-01	0.0012	1.0	2.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	6.0E+02	3.6E+01	8.7E-04	1.4E-02
2,4-Dichlorophenol	2.6E-01	0.0012	1.0	2.0E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.6E-01	3.6E+00	1.4E+00	1.4E-01
2,4-Dinitrophenol	***1.3E+00***	0.0012	1.0	1.0E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	1.6E-03	1.6E-02	1.6E+03	1.6E+02
2,4-Dinitrotoluene	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.0E-01	2.2E+00	1.7E+00	2.3E-01
2,6-Dinitrotoluene	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	8.5E-01	8.5E+00	6.2E-01	6.2E-02
2-Chloronaphthalene	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	2.6E+01	6.3E+01	2.0E-02	8.3E-03
2-Chlorophenol	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	6.0E+01	6.0E+00	8.6E-03	8.6E-02
2-Methylnaphthalene	2.2E-01	0.0012	1.0	1.7E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.0E+03	3.0E+04	1.7E-04	1.7E-05
2-Methylphenol (o-Cresol)	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	2.8E+02	2.8E+03	1.8E-03	1.8E-04
2-Nitroaniline	8.1E-01	0.0012	1.0	6.3E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
2-Nitrophenol	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.0E+00	8.5E+00	1.7E-01	6.2E-02
3,3'-Dichlorobenzidine	***5.2E-01***	0.0012	1.0	4.1E-02	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.0E+00	1.6E+01	5.3E+02	6.7E-02	2.0E-03
3/4-Methylphenol (m&p-Cresol)	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	2.8E+02	2.8E+03	1.8E-03	1.8E-04
3-Nitroaniline	***1.3E+00***	0.0012	1.0	1.0E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.2E-01	5.2E-02
4,6-Dinitro-2-methylphenol	***1.3E+00***	0.0012	1.0	1.0E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	3.0E-01	5.5E+00	8.7E+00	4.8E-01
4-Bromophenyl Phenyl Ether	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.2E+00	9.7E+00	4.3E-01	5.4E-02
4-Chloro-3-methylphenol	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.4E+02	1.4E+03	3.8E-03	3.8E-04
4-Chloroaniline	4.9E-01	0.0012	1.0	3.9E-02	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.0E+00	1.5E+00	1.5E+01	6.9E-01	6.9E-02
4-Chlorophenyl Phenyl Ether	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.2E+00	9.7E+00	4.3E-01	5.4E-02
4-Nitroaniline	1.0E+00	0.0012	1.0	7.9E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
4-Nitrophenol	***1.3E+00***	0.0012	1.0	1.0E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	3.0E+00	8.5E+00	8.7E-01	3.1E-01
Acenaphthene	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.8E+01	3.6E+01	2.9E-02	1.4E-02
Acenaphthylene	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.8E+01	3.6E+01	2.9E-02	1.4E-02
Anthracene	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+02	1.0E+03	5.0E-03	5.0E-04
Benzo(a)anthracene	2.2E-01	0.0012	1.0	1.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+00	1.0E+01	5.0E-01	5.0E-02
Benzo(a)pyrene	2.4E-01	0.0012	1.0	1.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+00	1.0E+01	5.0E-01	5.0E-02
Benzo(b)fluoranthene	2.5E-01	0.0012	1.0	1.9E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+00	1.0E+01	5.0E-01	5.0E-02
Benzo(g,h,i)perylene	4.3E-01	0.0012	1.0	3.3E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.0E+00	1.0E+01	5.1E-01	5.1E-02
Benzo(k)fluoranthene	2.7E-01	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+00	1.0E+01	5.0E-01	5.0E-02
bis(2-Chloroethoxy)methane	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
bis(2-Chloroethyl)ether	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.7E+01	2.1E+02	1.4E-02	2.5E-03
bis(2-Ethylhexyl)phthalate	3.2E-01	0.0012	1.0	2.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.3E+01	1.3E+02	4.1E-02	4.1E-03
Butyl Benzyl Phthalate	1.1E+01	0.0012	1.0	8.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.3E+00	1.9E+01	5.7E+01	7.0E-02	2.4E-02
Carbazole	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.1E+00	3.1E+01	1.7E-01	1.7E-02
Chrysene	2.8E-01	0.0012	1.0	2.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+00	1.0E+01	5.0E-01	5.0E-02
Dibenzo(a,h)anthracene	2.4E-01	0.0012	1.0	1.9E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+00	1.0E+01	5.0E-01	5.0E-02
Dibenzofuran	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.6E-02	1.6E-01	3.3E+01	3.3E+00
Diethyl Phthalate	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	5.6E+03	5.6E+04	9.3E-05	9.3E-06
Dimethyl Phthalate	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	4.8E+03	4.8E+04	1.1E-04	1.1E-05
Di-n-butylphthalate	2.4E-01	0.0012	1.0	1.9E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	4.3E+02	1.4E+03	1.2E-03	3.6E-04
Di-n-octylphthalate	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	5.7E+02	1.9E+03	9.1E-04	2.7E-04
Fluoranthene	2.2E-01	0.0012	1.0	1.7E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.3E+01	2.6E+01	4.0E-02	2.0E-02
Fluorene	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.3E+01	2.6E+01	4.0E-02	2.0E-02
Hexachlorobenzene	2.4E-01	0.0012	1.0	1.9E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	9.7E-02	3.5E-01	5.4E+00	1.5E+00
Hexachlorobutadiene	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	2.4E-01	2.4E-01	2.2E+00	2.2E+00
Hexachlorocyclopentadiene	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	7.2E-01	1.3E+00	7.2E-01	3.9E-01
Hexachloroethane	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.2E-01	1.8E+00	4.3E+00	2.9E-01
Indeno(1,2,3-cd)pyrene	2.5E-01	0.0012	1.0	2.0E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E+00	1.0E+01	5.0E-01	5.0E-02
Isophorone	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	2.2E+01	2.2E+02	2.3E-02	2.4E-03
Naphthalene	2.5E-01	0.0012	1.0	2.0E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	8.6E+00	1.7E+01	6.1E-02	3.0E-02
Nitrobenzene	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	4.8E-02	4.8E-01	1.1E+01	1.1E+00
N-Nitroso-di-n-propylamine	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.0E-02	1.0E-01	5.0E+01	5.0E+00
N-Nitrosodiphenylamine	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	2.4E+02	6.0E+01	2.2E-03	8.6E-03
Pentachlorophenol	4.4E+01	0.0012	1.0	3.4E+00	0.0090	5.4E-01	1.0	0.67	2.2E-01	***2.6E-02***	0.33	5.0E-03	0.015	1.0	3.6E+00	4.3E-01	4.3E+00	8.5E+00	8.5E-01
Phenanthrene	2.1E-01	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Phenol	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	7.2E+01	1.4E+02	7.2E-03	3.6E-03
Pyrene	2.6E-01	0.0012	1.0	2.0E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	7.8E+00	1.3E+01	6.6E-02	4.0E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected value
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-44
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site O (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																NOAEL	LOAEL	NOAEL HQ	LOAEL HQ
Pesticides																			
4,4'-DDD	3.0E-02	0.0012	1.0	2.3E-03	0.0090	6.0E-02	1.0	0.67	2.4E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	2.7E-02	3.4E-01	1.7E+00	8.0E-02	1.6E-02
4,4'-DDE	***7.7E-03***	0.0012	1.0	6.0E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.6E-03	3.4E-01	1.7E+00	2.8E-02	5.6E-03
4,4'-DDT	7.8E-02	0.0012	1.0	6.0E-03	0.0090	6.2E-01	1.0	0.67	2.5E-01	***5.0E-03***	0.33	9.8E-04	0.015	1.0	2.5E-01	3.4E-01	1.7E+00	7.4E-01	1.5E-01
Aldrin	***4.0E-03***	0.0012	1.0	3.1E-04	0.0090	1.2E-02	1.0	0.67	4.9E-03	1.9E-03	0.33	3.7E-04	0.015	1.0	5.6E-03	3.1E-01	1.6E+00	1.8E-02	3.6E-03
alpha-BHC	***4.0E-03***	0.0012	1.0	3.1E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.8E-03	2.5E+00	5.1E+00	1.9E-03	9.6E-04
alpha-Chlordane	3.8E-03	0.0012	1.0	2.9E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.8E-03	5.2E+00	1.0E+01	9.3E-04	4.7E-04
beta-BHC	***4.0E-03***	0.0012	1.0	3.1E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.8E-03	6.3E-01	3.2E+00	7.7E-03	1.5E-03
delta-BHC	***4.0E-03***	0.0012	1.0	3.1E-04	0.0090	2.4E-02	1.0	0.67	9.5E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	1.0E-02	2.5E+00	5.1E+00	4.0E-03	2.0E-03
Dieldrin	6.1E-02	0.0012	1.0	4.8E-03	0.0090	1.8E-01	1.0	0.67	7.2E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	7.8E-02	1.7E-02	1.7E-01	4.6E+00	4.6E-01
Endosulfan I	***4.0E-03***	0.0012	1.0	3.1E-04	0.0090	7.3E-03	1.0	0.67	2.9E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	3.7E-03	5.9E-01	5.9E+00	6.3E-03	6.3E-04
Endosulfan II	4.9E-03	0.0012	1.0	3.8E-04	0.0090	2.6E-02	1.0	0.67	1.1E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.2E-02	5.9E-01	5.9E+00	2.0E-02	2.0E-03
Endosulfan Sulfate	5.8E-02	0.0012	1.0	4.5E-03	0.0090	1.9E-02	1.0	0.67	7.8E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.3E-02	5.9E-01	5.9E+00	2.2E-02	2.2E-03
Endrin	***7.7E-03***	0.0012	1.0	6.0E-04	0.0090	3.3E-02	1.0	0.67	1.3E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.5E-02	9.4E-02	9.4E-01	1.6E-01	1.6E-02
Endrin Aldehyde	8.2E-03	0.0012	1.0	6.4E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.7E-03	9.4E-02	9.4E-01	1.0E-01	1.0E-02
Endrin Ketone	8.6E-03	0.0012	1.0	6.7E-04	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	4.2E-03	0.33	8.3E-04	0.015	1.0	9.5E-03	9.4E-02	9.4E-01	1.0E-01	1.0E-02
gamma-BHC (Lindane)	1.1E-02	0.0012	1.0	8.8E-04	0.0090	1.3E-02	1.0	0.67	5.1E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	6.3E-03	2.7E+01	2.7E+02	2.3E-04	2.3E-05
gamma-Chlordane	6.0E-02	0.0012	1.0	4.7E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.6E-03	0.33	3.2E-04	0.015	1.0	9.0E-03	5.2E+00	1.0E+01	1.7E-03	8.7E-04
Heptachlor	6.0E-03	0.0012	1.0	4.6E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.7E-03	0.33	3.4E-04	0.015	1.0	4.8E-03	7.0E-02	7.0E-01	6.9E-02	6.9E-03
Heptachlor Epoxide	***4.0E-03***	0.0012	1.0	3.1E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.8E-03	9.5E-04	7.0E-03	5.1E+00	6.9E-01
Methoxychlor	3.7E-02	0.0012	1.0	2.9E-03	0.0090	***1.0E-01***	1.0	0.67	4.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	4.8E-02	2.0E+00	4.0E+00	2.4E-02	1.2E-02
Toxaphene	***4.0E-01***	0.0012	1.0	3.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***2.6E-01***	0.33	5.0E-02	0.015	1.0	4.8E-01	7.9E+00	7.9E+01	6.1E-02	6.1E-03
Herbicides																			
2,4-D	1.1E+00	0.0012	1.0	8.3E-02	0.0090	5.8E-02	1.0	0.67	2.3E-02	1.1E-01	0.33	2.2E-02	0.015	1.0	1.3E-01	1.9E+00	9.4E+00	6.8E-02	1.4E-02
2,4-DB	1.1E+00	0.0012	1.0	8.3E-02	0.0090	***2.9E-02***	1.0	0.67	1.2E-02	2.0E-02	0.33	4.0E-03	0.015	1.0	9.8E-02	3.1E+00	9.6E+00	3.2E-02	1.0E-02
2,4,5-T	1.1E+00	0.0012	1.0	8.3E-02	0.0090	2.8E-02	1.0	0.67	1.1E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	9.6E-02	3.6E+00	1.2E+01	2.7E-02	8.0E-03
2,4,5-TP (Silvex)	***1.1E+00***	0.0012	1.0	8.2E-02	0.0090	2.7E-02	1.0	0.67	1.1E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	9.6E-02	1.1E+00	3.7E+00	8.5E-02	2.6E-02
Dalapon	***4.2E+01***	0.0012	1.0	3.3E+00	0.0090	***7.0E+00***	1.0	0.67	2.8E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	6.7E+00	1.0E+01	3.5E+01	6.5E-01	1.9E-01
Dicamba	1.1E+00	0.0012	1.0	8.3E-02	0.0090	***7.0E-02***	1.0	0.67	2.8E-02	***3.0E-02***	0.33	5.9E-03	0.015	1.0	1.2E-01	3.9E+00	1.3E+01	3.0E-02	9.0E-03
Dichlorprop	1.3E+01	0.0012	1.0	9.9E-01	0.0090	***3.5E-01***	1.0	0.67	1.4E-01	***1.5E-01***	0.33	3.0E-02	0.015	1.0	1.2E+00	2.1E-01	2.1E+00	5.6E+00	5.6E-01
Dinoseb	***2.6E-01***	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.2E-01	1.2E+00	4.3E+00	4.3E-01
MCPA	***2.5E+02***	0.0012	1.0	2.0E+01	0.0090	3.4E+01	1.0	0.67	1.4E+01	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.4E+01	2.2E-01	1.1E+00	1.5E+02	3.0E+01
MCPP	2.6E+02	0.0012	1.0	2.0E+01	0.0090	***7.0E+00***	1.0	0.67	2.8E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	2.3E+01	3.6E-01	1.1E+00	6.4E+01	2.1E+01
PCBs																			
Total PCBs	2.4E+02	0.0012	1.0	1.9E+01	0.0090	2.1E+01	1.0	0.67	8.3E+00	***2.5E-02***	0.33	5.0E-03	0.015	1.0	2.7E+01	1.2E-01	1.2E+00	2.2E+02	2.2E+01
Dioxins/Furans																			
TEQ	1.9E-02	0.0012	1.0	1.5E-03	0.0090	1.2E-03	1.0	0.67	4.8E-04	1.3E-05	0.33	2.7E-06	0.015	1.0	2.0E-03	1.2E-06	1.2E-05	1.6E+03	1.6E+02
Metals*																			
Aluminum	7.6E+03	0.0012	1.0	6.0E+02	0.0090	7.8E+02	1.0	0.67	3.1E+02	1.5E+01	0.33	3.0E+00	0.015	1.0	9.1E+02	2.0E+00	2.0E+01	4.5E+02	4.5E+01
Antimony	9.8E-01	0.0012	1.0	7.7E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	6.8E-01	1.3E-01	1.3E+00	5.2E+00	5.2E-01
Arsenic	7.5E+00	0.0012	1.0	5.9E-01	0.0090	5.6E+00	1.0	0.67	2.2E+00	***5.0E-01***	0.33	9.9E-02	0.015	1.0	2.9E+00	1.4E-01	1.4E+00	2.1E+01	2.1E+00
Barium	2.2E+02	0.0012	1.0	1.7E+01	0.0090	1.2E+01	1.0	0.67	4.9E+00	1.9E+00	0.33	3.8E-01	0.015	1.0	2.3E+01	1.1E+01	4.4E+01	2.0E+00	5.1E-01
Beryllium	5.0E-01	0.0012	1.0	3.9E-02	0.0090	***2.0E-01***	1.0	0.67	8.0E-02	***2.0E-01***	0.33	4.0E-02	0.015	1.0	1.6E-01	8.0E-01	8.0E+00	2.0E-01	2.0E-02
Cadmium	7.6E+00	0.0012	1.0	5.9E-01	0.0090	1.8E+00	1.0	0.67	7.4E-01	3.6E-01	0.33	7.1E-02	0.015	1.0	1.4E+00	5.8E+00	5.8E+01	2.4E-01	2.4E-02
Chromium	1.7E+01	0.0012	1.0	1.3E+00	0.0090	1.3E+00	1.0	0.67	5.2E-01	2.0E-01	0.33	4.0E-02	0.015	1.0	1.9E+00	4.0E+00	1.6E+01	4.7E-01	1.2E-01
Cobalt	6.2E+00	0.0012	1.0	4.8E-01	0.0090	1.8E+00	1.0	0.67	7.2E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	1.3E+00	6.0E-02	6.0E-01	2.2E+01	2.2E+00
Copper	1.7E+02	0.0012	1.0	1.3E+01	0.0090	8.6E+00	1.0	0.67	3.4E+00	2.0E+01	0.33	4.0E+00	0.015	1.0	2.0E+01	1.5E+01	2.0E+01	1.3E+00	1.0E+00
Lead	7.3E+01	0.0012	1.0	5.7E+00	0.0090	3.1E+00	1.0	0.67	1.3E+00	1.0E+00	0.33	2.0E-01	0.015	1.0	7.1E+00	9.7E+00	9.7E+01	7.4E-01	7.4E-02
Manganese	3.7E+02	0.0012	1.0	2.9E+01	0.0090	4.8E+01	1.0	0.67	1.9E+01	5.5E+00	0.33	1.1E+00	0.015	1.0	4.9E+01	1.1E+02	3.4E+02	4.6E-01	1.4E-01
Mercury	3.6E+01	0.0012	1.0	2.8E+00	0.0090	2.7E-01	1.0	0.67	1.1E-01	1.3E-01	0.33	2.6E-02	0.015	1.0	2.9E+00	9.9E-02	4.9E-01	2.9E+01	5.9E+00
Nickel	3.0E+01	0.0012	1.0	2.3E+00	0.0090	1.9E+00	1.0	0.67	7.8E-01	***2.0E+00***	0.33	4.0E-01	0.015	1.0	3.5E+00	4.8E+01	9.7E+01	7.2E-02	3.6E-02
Selenium	2.2E+00	0.0012	1.0	1.7E-01	0.0090	5.8E-01	1.0	0.67	2.3E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	5.0E-01	1.9E-01	3.2E-01	2.6E+00	1.6E+00
Silver	1.6E+00	0.0012	1.0	1.3E-01	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	4.3E-01	1.9E-01	1.9E+00	2.3E+00	2.3E-01
Thallium	***1.2E+00***	0.0012	1.0	9.3E-02	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.9E-01	1.4E-02	1.4E-01	2.9E+01	2.9E+00
Vanadium	2.4E+01	0.0012	1.0	1.9E+00	0.0090	2.6E+00	1.0	0.67	1.1E+00	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.0E+00	1.1E-01	1.1E+00	2.7E+01	2.7E+00
Zinc	5.5E+02	0.0012	1.0	4.3E+01	0.0090	3.6E+01	1.0	0.67	1.4E+01	5.6E+01	0.33	1.1E+01	0.015	1.0	6.8E+01	2.6E+02	5.1E+02	2.7E-01	1.3E-01

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected value
Shaded cells indicated HQs equal to or greater than 1.0.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

Table 7-45
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site O (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs																(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	2.2E-01	0.0012	1.0	1.7E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.8E+01	6.5E+01	2.9E-02	8.0E-03
1,2-Dichlorobenzene	1.1E+00	0.0012	1.0	8.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.9E-01	1.0E+02	1.4E+03	5.7E-03	4.0E-04
1,3-Dichlorobenzene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+02	1.4E+03	5.6E-03	4.0E-04
1,4-Dichlorobenzene	6.3E-01	0.0012	1.0	4.9E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.5E-01	1.0E+02	1.8E+02	5.3E-03	3.0E-03
2,2'-Oxybis(1-Chloropropane)	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	3.7E+01	2.1E+02	1.5E-02	2.8E-03
2,4,5-Trichlorophenol	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.2E+01	3.6E+01	4.8E-02	1.6E-02
2,4,6-Trichlorophenol	1.3E+00	0.0012	1.0	1.0E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.0E-01	6.0E+02	3.6E+01	1.0E-03	1.7E-02
2,4-Dichlorophenol	9.4E-01	0.0012	1.0	7.3E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.7E-01	3.6E-01	3.6E+00	1.6E+00	1.6E-01
2,4-Dinitrophenol	***5.0E+00***	0.0012	1.0	3.9E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.9E+00	1.6E-03	1.6E-02	1.8E+03	1.8E+02
2,4-Dinitrotoluene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	3.0E-01	2.2E+00	1.9E+00	2.6E-01
2,6-Dinitrotoluene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	8.5E-01	8.5E+00	6.8E-01	6.8E-02
2-Chloronaphthalene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	2.6E+01	6.3E+01	2.2E-02	9.2E-03
2-Chlorophenol	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	6.0E+01	6.0E+00	9.6E-03	9.6E-02
2-Methylnaphthalene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	3.0E+03	3.0E+04	1.9E-04	1.9E-05
2-Methylphenol (o-Cresol)	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	2.8E+02	2.8E+03	2.1E-03	2.1E-04
2-Nitroaniline	***1.1E+00***	0.0012	1.0	8.2E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
2-Nitrophenol	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	3.0E+00	8.5E+00	1.9E-01	6.8E-02
3,3'-Dichlorobenzidine	***2.0E+00***	0.0012	1.0	1.5E-01	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.2E+00	1.6E+01	5.3E+02	7.4E-02	2.2E-03
3/4-Methylphenol (m&p-Cresol)	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	2.8E+02	2.8E+03	2.1E-03	2.1E-04
3-Nitroaniline	***5.0E+00***	0.0012	1.0	3.9E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.9E+00	5.1E+00	5.1E+01	5.7E-01	5.7E-02
4,6-Dinitro-2-methylphenol	***5.0E+00***	0.0012	1.0	3.9E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.9E+00	3.0E-01	5.5E+00	9.6E+00	5.3E-01
4-Bromophenyl Phenyl Ether	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.2E+00	9.7E+00	4.8E-01	6.0E-02
4-Chloro-3-methylphenol	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.4E+02	1.4E+03	4.3E-03	4.3E-04
4-Chloroaniline	***2.0E+00***	0.0012	1.0	1.5E-01	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.2E+00	1.5E+00	1.5E+01	7.6E-01	7.6E-02
4-Chlorophenyl Phenyl Ether	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.2E+00	9.7E+00	4.8E-01	6.0E-02
4-Nitroaniline	1.2E+00	0.0012	1.0	9.4E-02	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.6E+00	5.1E+00	5.1E+01	5.1E-01	5.1E-02
4-Nitrophenol	***5.0E+00***	0.0012	1.0	3.9E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.9E+00	3.0E+00	8.5E+00	9.6E-01	3.4E-01
Acenaphthene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.8E+01	3.6E+01	3.2E-02	1.6E-02
Acenaphthylene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.8E+01	3.6E+01	3.2E-02	1.6E-02
Anthracene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+02	1.0E+03	5.5E-03	5.5E-04
Benzo(a)anthracene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+00	1.0E+01	5.5E-01	5.5E-02
Benzo(a)pyrene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+00	1.0E+01	5.5E-01	5.5E-02
Benzo(b)fluoranthene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+00	1.0E+01	5.5E-01	5.5E-02
Benzo(g,h,i)perylene	1.2E+00	0.0012	1.0	9.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.9E-01	1.0E+00	1.0E+01	5.7E-01	5.7E-02
Benzo(k)fluoranthene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+00	1.0E+01	5.5E-01	5.5E-02
bis(2-Chloroethoxy)methane	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	3.7E+01	2.1E+02	1.5E-02	2.8E-03
bis(2-Chloroethyl)ether	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	3.7E+01	2.1E+02	1.5E-02	2.8E-03
bis(2-Ethylhexyl)phthalate	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.3E+01	1.3E+02	4.6E-02	4.6E-03
Butyl Benzyl Phthalate	7.9E+01	0.0012	1.0	6.2E+00	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.7E+00	1.9E+01	5.7E+01	3.5E-01	1.2E-01
Carbazole	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	3.1E+00	3.1E+01	1.8E-01	1.8E-02
Chrysene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+00	1.0E+01	5.5E-01	5.5E-02
Dibenzo(a,h)anthracene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+00	1.0E+01	5.5E-01	5.5E-02
Dibenzofuran	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.6E-02	1.6E-01	3.6E+01	3.6E+00
Diethyl Phthalate	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	5.6E+03	5.6E+04	1.0E-04	1.0E-05
Dimethyl Phthalate	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	4.8E+03	4.8E+04	1.2E-04	1.2E-05
Di-n-butylphthalate	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	4.3E+02	1.4E+03	1.3E-03	4.0E-04
Di-n-octylphthalate	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	5.7E+02	1.9E+03	1.0E-03	3.0E-04
Fluoranthene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.3E+01	2.6E+01	4.4E-02	2.2E-02
Fluorene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.3E+01	2.6E+01	4.4E-02	2.2E-02
Hexachlorobenzene	5.1E-01	0.0012	1.0	4.0E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.4E-01	9.7E-02	3.5E-01	5.6E+00	1.5E+00
Hexachlorobutadiene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	2.4E-01	2.4E-01	2.4E+00	2.4E+00
Hexachlorocyclopentadiene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	7.2E-01	1.3E+00	8.0E-01	4.3E-01
Hexachloroethane	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.2E-01	1.8E+00	4.8E+00	3.2E-01
Indeno(1,2,3-cd)pyrene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+00	1.0E+01	5.5E-01	5.5E-02
Isophorone	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	2.2E+01	2.2E+02	2.6E-02	2.7E-03
Naphthalene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	8.6E+00	1.7E+01	6.7E-02	3.4E-02
Nitrobenzene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	4.8E-02	4.8E-01	1.2E+01	1.2E+00
N-Nitroso-di-n-propylamine	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E-02	1.0E-01	5.5E+01	5.5E+00
N-Nitrosodiphenylamine	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	2.4E+02	6.0E+01	2.4E-03	9.6E-03
Pentachlorophenol	4.8E+02	0.0012	1.0	3.7E+01	0.0090	1.4E+00	1.0	0.67	5.6E-01	***2.6E-02***	0.33	5.0E-03	0.015	1.0	3.8E+01	4.3E-01	4.3E+00	8.9E+01	8.9E+00
Phenanthrene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.8E+01	3.6E+01	3.2E-02	1.6E-02
Phenol	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	7.2E+01	1.4E+02	8.0E-03	4.0E-03
Pyrene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	7.8E+00	1.3E+01	7.4E-02	4.4E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected value
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-45
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site O (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
Pesticides																NOAEL	LOAEL	NOAEL HQ	LOAEL HQ
4,4'-DDD	8.6E-02	0.0012	1.0	6.7E-03	0.0090	1.4E-01	1.0	0.67	5.6E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	6.4E-02	3.4E-01	1.7E+00	1.9E-01	3.7E-02
4,4'-DDE	***2.0E-02***	0.0012	1.0	1.5E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.1E-02	3.4E-01	1.7E+00	3.1E-02	6.1E-03
4,4'-DDT	2.3E-01	0.0012	1.0	1.8E-02	0.0090	1.2E+00	1.0	0.67	4.8E-01	***5.0E-03***	0.33	9.8E-04	0.015	1.0	5.0E-01	3.4E-01	1.7E+00	1.5E+00	2.9E-01
Aldrin	***1.0E-02***	0.0012	1.0	7.8E-04	0.0090	2.1E-02	1.0	0.67	8.4E-03	1.9E-03	0.33	3.7E-04	0.015	1.0	9.6E-03	3.1E-01	1.6E+00	3.1E-02	6.1E-03
alpha-BHC	***1.0E-02***	0.0012	1.0	7.8E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	5.3E-03	2.5E+00	5.1E+00	2.1E-03	1.0E-03
alpha-Chlordane	9.4E-03	0.0012	1.0	7.3E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	5.3E-03	5.2E+00	1.0E+01	1.0E-03	5.1E-04
beta-BHC	***1.0E-02***	0.0012	1.0	7.8E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	5.3E-03	6.3E-01	3.2E+00	8.4E-03	1.7E-03
delta-BHC	***1.0E-02***	0.0012	1.0	7.8E-04	0.0090	5.1E-02	1.0	0.67	2.1E-02	1.5E-03	0.33	3.0E-04	0.015	1.0	2.2E-02	2.5E+00	5.1E+00	8.5E-03	4.3E-03
Dieldrin	1.8E-01	0.0012	1.0	1.4E-02	0.0090	4.0E-01	1.0	0.67	1.6E-01	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.8E-01	1.7E-02	1.7E-01	1.0E+01	1.0E+00
Endosulfan I	***1.0E-02***	0.0012	1.0	7.8E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	5.3E-03	5.9E-01	5.9E+00	8.9E-03	8.9E-04
Endosulfan II	1.1E-02	0.0012	1.0	8.6E-04	0.0090	3.9E-02	1.0	0.67	1.6E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.8E-02	5.9E-01	5.9E+00	2.9E-02	2.9E-03
Endosulfan Sulfate	1.7E-01	0.0012	1.0	1.3E-02	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	2.2E-02	5.9E-01	5.9E+00	3.7E-02	3.7E-03
Endrin	***2.0E-02***	0.0012	1.0	1.5E-03	0.0090	5.8E-02	1.0	0.67	2.3E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	2.6E-02	9.4E-02	9.4E-01	2.7E-01	2.7E-02
Endrin Aldehyde	***2.0E-02***	0.0012	1.0	1.5E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.1E-02	9.4E-02	9.4E-01	1.1E-01	1.1E-02
Endrin Ketone	2.2E-02	0.0012	1.0	1.7E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	4.2E-03	0.33	8.3E-04	0.015	1.0	1.1E-02	9.4E-02	9.4E-01	1.1E-01	1.1E-02
gamma-BHC (Lindane)	3.2E-02	0.0012	1.0	2.5E-03	0.0090	1.8E-02	1.0	0.67	7.2E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	1.0E-02	2.7E+01	2.7E+02	3.7E-04	3.7E-05
gamma-Chlordane	1.8E-01	0.0012	1.0	1.4E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.6E-03	0.33	3.2E-04	0.015	1.0	1.8E-02	5.2E+00	1.0E+01	3.5E-03	1.8E-03
Heptachlor	1.6E-02	0.0012	1.0	1.2E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.7E-03	0.33	3.4E-04	0.015	1.0	5.6E-03	7.0E-02	7.0E-01	8.1E-02	8.1E-03
Heptachlor Epoxide	***1.0E-02***	0.0012	1.0	7.8E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	5.3E-03	9.5E-04	7.0E-03	5.6E+00	7.6E-01
Methoxychlor	***1.0E-01***	0.0012	1.0	7.8E-03	0.0090	***1.0E-01***	1.0	0.67	4.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	5.3E-02	2.0E+00	4.0E+00	2.7E-02	1.3E-02
Toxaphene	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***2.6E-01***	0.33	5.0E-02	0.015	1.0	5.3E-01	7.9E+00	7.9E+01	6.7E-02	6.7E-03
Herbicides																			
2,4-D	***1.0E+01***	0.0012	1.0	7.8E-01	0.0090	9.4E-02	1.0	0.67	3.8E-02	1.1E-01	0.33	2.2E-02	0.015	1.0	8.4E-01	1.9E+00	9.4E+00	4.5E-01	9.0E-02
2,4-DB	***1.0E+01***	0.0012	1.0	7.8E-01	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	2.0E-02	0.33	4.0E-03	0.015	1.0	8.0E-01	3.1E+00	9.6E+00	2.6E-01	8.4E-02
2,4,5-T	***1.0E+01***	0.0012	1.0	7.8E-01	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	8.0E-01	3.6E+00	1.2E+01	2.2E-01	6.6E-02
2,4,5-TP (Silvex)	***1.0E+01***	0.0012	1.0	7.8E-01	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	8.0E-01	1.1E+00	3.7E+00	7.1E-01	2.1E-01
Dalapon	***3.9E+02***	0.0012	1.0	3.0E+01	0.0090	***1.2E+01***	1.0	0.67	4.8E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.6E+01	1.0E+01	3.5E+01	3.5E+00	1.0E+00
Dicamba	***1.0E+01***	0.0012	1.0	7.8E-01	0.0090	***1.2E-01***	1.0	0.67	4.8E-02	***3.0E-02***	0.33	5.9E-03	0.015	1.0	8.3E-01	3.9E+00	1.3E+01	2.1E-01	6.4E-02
Dichlorprop	***1.2E+02***	0.0012	1.0	9.4E+00	0.0090	***6.0E-01***	1.0	0.67	2.4E-01	***1.5E-01***	0.33	3.0E-02	0.015	1.0	9.6E+00	2.1E-01	2.1E+00	4.6E+01	4.6E+00
Dinoseb	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.2E-01	1.2E+00	4.8E+00	4.8E-01
MCPA	***2.4E+03***	0.0012	1.0	1.8E+02	0.0090	5.8E+01	1.0	0.67	2.3E+01	***3.0E+00***	0.33	5.9E-01	0.015	1.0	2.1E+02	2.2E-01	1.1E+00	9.2E+02	1.8E+02
MCPP	***2.4E+03***	0.0012	1.0	1.8E+02	0.0090	***1.2E+01***	1.0	0.67	4.8E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	1.9E+02	3.6E-01	1.1E+00	5.2E+02	1.7E+02
PCBs																			
Total PCBs	7.1E+02	0.0012	1.0	5.5E+01	0.0090	3.3E+01	1.0	0.67	1.3E+01	***2.5E-02***	0.33	5.0E-03	0.015	1.0	6.8E+01	1.2E-01	1.2E+00	5.7E+02	5.7E+01
Dioxins/Furans																			
TEQ	5.1E-02	0.0012	1.0	4.0E-03	0.0090	2.6E-03	1.0	0.67	1.0E-03	1.3E-05	0.33	2.7E-06	0.015	1.0	5.0E-03	1.2E-06	1.2E-05	4.1E+03	4.1E+02
Metals*																			
Aluminum	1.1E+04	0.0012	1.0	8.6E+02	0.0090	9.6E+02	1.0	0.67	3.9E+02	1.5E+01	0.33	3.0E+00	0.015	1.0	1.2E+03	2.0E+00	2.0E+01	6.2E+02	6.2E+01
Antimony	1.6E+00	0.0012	1.0	1.2E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	7.2E-01	1.3E-01	1.3E+00	5.6E+00	5.6E-01
Arsenic	1.1E+01	0.0012	1.0	8.6E-01	0.0090	6.3E+00	1.0	0.67	2.5E+00	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.5E+00	1.4E-01	1.4E+00	2.5E+01	2.5E+00
Barium	5.4E+02	0.0012	1.0	4.2E+01	0.0090	1.6E+01	1.0	0.67	6.4E+00	1.9E+00	0.33	3.8E-01	0.015	1.0	4.9E+01	1.1E+01	4.4E+01	4.3E+00	1.1E+00
Beryllium	7.5E-01	0.0012	1.0	5.9E-02	0.0090	***2.0E-01***	1.0	0.67	8.0E-02	***2.0E-01***	0.33	4.0E-02	0.015	1.0	1.8E-01	8.0E-01	8.0E+00	2.2E-01	2.2E-02
Cadmium	3.2E+01	0.0012	1.0	2.5E+00	0.0090	2.6E+00	1.0	0.67	1.0E+00	3.6E-01	0.33	7.1E-02	0.015	1.0	3.6E+00	5.8E+00	5.8E+01	6.2E-01	6.2E-02
Chromium	4.2E+01	0.0012	1.0	3.3E+00	0.0090	1.7E+00	1.0	0.67	6.8E-01	2.0E-01	0.33	4.0E-02	0.015	1.0	4.0E+00	4.0E+00	1.6E+01	1.0E+00	2.5E-01
Cobalt	7.4E+00	0.0012	1.0	5.8E-01	0.0090	1.9E+00	1.0	0.67	7.6E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	1.4E+00	6.0E-02	6.0E-01	2.4E+01	2.4E+00
Copper	6.8E+02	0.0012	1.0	5.3E+01	0.0090	9.1E+00	1.0	0.67	3.7E+00	2.0E+01	0.33	4.0E+00	0.015	1.0	6.1E+01	1.5E+01	2.0E+01	4.0E+00	3.1E+00
Lead	1.7E+02	0.0012	1.0	1.3E+01	0.0090	3.9E+00	1.0	0.67	1.6E+00	1.0E+00	0.33	2.0E-01	0.015	1.0	1.5E+01	9.7E+00	9.7E+01	1.6E+00	1.6E-01
Manganese	5.6E+02	0.0012	1.0	4.4E+01	0.0090	5.4E+01	1.0	0.67	2.2E+01	5.5E+00	0.33	1.1E+00	0.015	1.0	6.6E+01	1.1E+02	3.4E+02	6.3E-01	1.9E-01
Mercury	1.8E+02	0.0012	1.0	1.4E+01	0.0090	4.2E-01	1.0	0.67	1.7E-01	1.3E-01	0.33	2.6E-02	0.015	1.0	1.4E+01	9.9E-02	4.9E-01	1.4E+02	2.9E+01
Nickel	1.4E+02	0.0012	1.0	1.1E+01	0.0090	2.2E+00	1.0	0.67	8.8E-01	***2.0E+00***	0.33	4.0E-01	0.015	1.0	1.2E+01	4.8E+01	9.7E+01	2.5E-01	1.3E-01
Selenium	1.0E+01	0.0012	1.0	7.8E-01	0.0090	7.3E-01	1.0	0.67	2.9E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	1.2E+00	1.9E-01	3.2E-01	6.1E+00	3.7E+00
Silver	4.2E+00	0.0012	1.0	3.3E-01	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	6.3E-01	1.9E-01	1.9E+00	3.3E+00	3.3E-01
Thallium	***1.5E+00***	0.0012	1.0	1.1E-01	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	4.1E-01	1.4E-02	1.4E-01	3.0E+01	3.0E+00
Vanadium	2.9E+01	0.0012	1.0	2.3E+00	0.0090	3.2E+00	1.0	0.67	1.3E+00	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.6E+00	1.1E-01	1.1E+00	3.3E+01	3.3E+00
Zinc	2.4E+03	0.0012	1.0	1.9E+02	0.0090	4.2E+01	1.0	0.67	1.7E+01	5.6E+01	0.33	1.1E+01	0.015	1.0	2.2E+02	2.6E+02	5.1E+02	8.4E-01	4.2E-01

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected value
Shaded cells indicated HQs equal to or greater than 1.0.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

Table 7-46
COPECs for Site O
Sauget, IL

Soil HQs	Short-tailed Shrew Modeling HQs (Average Conc.)	Short-tailed Shrew Modeling HQs (Maximum Conc.)	Prairie Vole Modeling HQs (Average Conc.)	Prairie Vole Modeling HQs (Maximum Conc.)
Benzene	Hexachlorobenzene	2,4-Dichlorophenol (NOAEL only)	PCBs (NOAEL only)	Pentachlorophenol (NOAEL only)
Ethylbenzene	Pentachlorophenol (NOAEL only)	Hexchlorobenzene	Dioxins/furans	PCBs
Tetrachloroethene	Dieldrin (NOAEL only)	Pentachlorophenol	Mercury (NOAEL only)	Dioxins/furans
Xylenes (total)	Dichloroprop (NOAEL only)	4,4'-DDT (NOAEL only)		Mercury
1,2-Dichlorobenzene	MCPA	Dieldrin		Vanadium (NOAEL only)
2,4-Dichlorophenol	MCPP	MCPA		
Benzo(b)fluoranthene	PCBs	PCBs		
Benzo(k)fluoranthene	Dioxins/Furans	Dioxins/Furans		
bis(2-Ethylhexyl)phthalate	Aluminum	Aluminum		
Hexachlorobenzene	Antimony (NOAEL only)	Arsenic		
Indeno(1,2,3-cd)pyrene	Barium (NOAEL only)	Barium		
Pentachlorophenol	Cobalt	Chromium (NOAEL only)		
Pyrene	Copper	Cobalt		
4,4'-DDD	Mercury	Copper		
4,4'-DDT	Selenium	Mercury		
Dieldrin	Silver (NOAEL only)	Selenium		
gamma-BHC (Lindane)	Vanadium	Silver (NOAEL only)		
PCBs		Vanadium		
Dioxins/furans				
Aluminum				
Arsenic				
Barium				
Cadmium				
Chromium				
Copper				
Iron				
Lead				
Manganese				
Mercury				
Nickel				
Selenium				
Silver				
Vanadium				
Zinc				

NOTES:
Analytes listed are only for those exceeding their benchmark/TRV, based on detected values, and were above the background values.
Shaded entries are for those compounds that are COPECs for all receptors and all concentrations.

Table 7-47
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site S (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	1.8E+01	0.00012	1.0	5.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.0E-01	1.7E+01	6.2E+01	5.9E-03	1.6E-03
1,2-Dichlorobenzene	1.9E+01	0.00012	1.0	5.4E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.0E-01	9.9E+01	1.4E+03	1.0E-03	7.4E-05
1,3-Dichlorobenzene	6.2E-01	0.00012	1.0	1.8E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	9.9E+01	1.4E+03	5.2E-04	3.7E-05
1,4-Dichlorobenzene	3.9E+00	0.00012	1.0	1.1E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.1E-02	9.9E+01	1.7E+02	6.1E-04	3.5E-04
2,2'-Oxybis(1-Chloropropane)	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	3.6E+01	2.0E+02	1.7E-03	3.0E-04
2,4,5-Trichlorophenol	6.7E-01	0.00012	1.0	1.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.2E+01	3.5E+01	4.4E-03	1.5E-03
2,4,6-Trichlorophenol	4.2E+00	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	5.8E+02	3.5E+01	1.1E-04	1.8E-03
2,4-Dichlorophenol	1.3E+00	0.00012	1.0	3.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	3.5E-01	3.5E+00	1.5E-01	1.5E-02
2,4-Dinitrophenol	***1.9E+01***	0.00012	1.0	5.5E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.1E-01	1.6E-03	1.6E-02	2.0E+02	2.0E+01
2,4-Dinitrotoluene	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	2.9E-01	2.2E+00	2.1E-01	2.8E-02
2,6-Dinitrotoluene	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	8.1E-01	8.1E+00	7.4E-02	7.4E-03
2-Chloronaphthalene	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	2.5E+01	6.0E+01	2.4E-03	1.0E-03
2-Chlorophenol	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	5.8E+01	5.8E+00	1.0E-03	1.0E-02
2-Methylnaphthalene	5.6E+00	0.00012	1.0	1.6E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.6E-02	2.8E+03	2.8E+04	2.3E-05	2.3E-06
2-Methylphenol (o-Cresol)	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	2.7E+02	2.7E+03	2.2E-04	2.2E-05
2-Nitroaniline	2.9E+00	0.00012	1.0	8.4E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.4E-02	5.4E-03
2-Nitrophenol	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	2.9E+00	8.1E+00	2.1E-02	7.4E-03
3,3'-Dichlorobenzidine	***7.5E+00***	0.00012	1.0	2.2E-02	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.2E-01	1.5E+01	5.1E+02	8.2E-03	2.4E-04
3/4-Methylphenol (m&p-Cresol)	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	2.7E+02	2.7E+03	2.2E-04	2.2E-05
3-Nitroaniline	***1.9E+01***	0.00012	1.0	5.5E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.1E-01	4.9E+00	4.9E+01	6.4E-02	6.4E-03
4,6-Dinitro-2-methylphenol	***1.9E+01***	0.00012	1.0	5.5E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.1E-01	2.9E-01	5.3E+00	1.1E+00	5.9E-02
4-Bromophenyl Phenyl Ether	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	1.2E+00	9.2E+00	5.2E-02	6.5E-03
4-Chloro-3-methylphenol	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	1.3E+02	1.3E+03	4.6E-04	4.6E-05
4-Chloroaniline	***7.5E+00***	0.00012	1.0	2.2E-02	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.2E-01	1.4E+00	1.4E+01	8.4E-02	8.4E-03
4-Chlorophenyl Phenyl Ether	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	1.2E+00	9.2E+00	5.2E-02	6.5E-03
4-Nitroaniline	2.9E+01	0.00012	1.0	8.4E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.4E-01	4.9E+00	4.9E+01	7.0E-02	7.0E-03
4-Nitrophenol	***1.9E+01***	0.00012	1.0	5.5E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.1E-01	2.9E+00	8.1E+00	1.1E-01	3.8E-02
Acenaphthene	7.2E-01	0.00012	1.0	2.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.7E+01	3.5E+01	3.0E-03	1.5E-03
Acenaphthylene	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	1.7E+01	3.5E+01	3.4E-03	1.7E-03
Anthracene	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	1.0E+02	1.0E+03	6.0E-04	6.0E-05
Benzo(a)anthracene	4.1E+00	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.1E-02	1.0E+00	1.0E+01	6.2E-02	6.2E-03
Benzo(a)pyrene	2.8E+00	0.00012	1.0	8.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.8E-02	1.0E+00	1.0E+01	5.8E-02	5.8E-03
Benzo(b)fluoranthene	3.4E+00	0.00012	1.0	9.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.9E-02	1.0E+00	1.0E+01	6.0E-02	6.0E-03
Benzo(g,h,i)perylene	2.2E+00	0.00012	1.0	6.4E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.6E-02	1.0E+00	1.0E+01	5.6E-02	5.6E-03
Benzo(k)fluoranthene	3.3E+00	0.00012	1.0	9.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.9E-02	1.0E+00	1.0E+01	5.9E-02	5.9E-03
bis(2-Chloroethoxy)methane	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	3.6E+01	2.0E+02	1.7E-03	3.0E-04
bis(2-Chloroethyl)ether	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	3.6E+01	2.0E+02	1.7E-03	3.0E-04
bis(2-Ethylhexyl)phthalate	2.2E+00	0.00012	1.0	6.4E-03	0.0042	8.2E-02	1.0	8.2E-03	0.0416	1.0	1.5E-02	1.9E+01	1.9E+02	7.8E-04	7.8E-05
Butyl Benzyl Phthalate	6.0E+01	0.00012	1.0	1.7E-01	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	2.2E-01	1.8E+01	5.4E+01	1.2E-02	4.1E-03
Carbazole	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	3.0E+00	3.0E+01	2.0E-02	2.0E-03
Chrysene	1.0E+01	0.00012	1.0	2.9E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.9E-02	1.0E+00	1.0E+01	7.9E-02	7.9E-03
Dibenzo(a,h)anthracene	1.0E+00	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.3E-02	5.3E-03
Dibenzofuran	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	1.5E-02	1.5E-01	3.9E+00	3.9E-01
Diethyl Phthalate	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	4.5E+03	4.5E+04	1.3E-05	1.3E-06
Dimethyl Phthalate	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	4.6E+03	4.6E+04	1.3E-05	1.3E-06
Di-n-butylphthalate	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	5.6E+02	1.9E+03	1.1E-04	3.2E-05
Di-n-octylphthalate	7.7E-01	0.00012	1.0	2.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	5.5E+02	1.8E+03	9.4E-05	2.8E-05
Fluoranthene	2.2E+00	0.00012	1.0	6.4E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.6E-02	1.2E+01	2.5E+01	4.5E-03	2.2E-03
Fluorene	7.2E-01	0.00012	1.0	2.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E+01	2.5E+01	4.1E-03	2.1E-03
Hexachlorobenzene	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	9.2E-02	3.4E-01	6.5E-01	1.8E-01
Hexachlorobutadiene	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	2.3E-01	2.3E-01	2.6E-01	2.6E-01
Hexachlorocyclopentadiene	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	6.9E-01	1.3E+00	8.6E-02	4.7E-02
Hexachloroethane	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	1.2E-01	1.7E+00	5.2E-01	3.5E-02
Indeno(1,2,3-cd)pyrene	7.7E-01	0.00012	1.0	2.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.2E-02	5.2E-03
Isophorone	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	2.2E+01	2.1E+02	2.8E-03	2.9E-04
Naphthalene	1.2E+00	0.00012	1.0	3.4E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	8.2E+00	1.6E+01	6.4E-03	3.2E-03
Nitrobenzene	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	4.6E-02	4.6E-01	1.3E+00	1.3E-01
N-Nitroso-di-n-propylamine	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	1.0E-02	1.0E-01	6.0E+00	6.0E-01
N-Nitrosodiphenylamine	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	2.3E+02	5.8E+01	2.6E-04	1.0E-03
Pentachlorophenol	2.2E+02	0.00012	1.0	6.3E-01	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	6.4E-01	3.7E-01	3.7E+00	1.7E+00	1.7E-01
Phenanthrene	4.7E+00	0.00012	1.0	1.4E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.3E-02	1.7E+01	3.5E+01	3.6E-03	1.8E-03
Phenol	***3.6E+00***	0.00012	1.0	1.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.0E-02	6.9E+01	1.4E+02	8.6E-04	4.3E-04
Pyrene	1.4E+01	0.00012	1.0	4.1E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	9.0E-02	7.5E+00	1.2E+01	1.2E-02	7.2E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workpla
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-47
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site S (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	1.7E+00	0.00012	1.0	4.9E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.4E-03	4.2E-01	2.1E+00	1.3E-02	2.6E-03
4,4'-DDE	3.3E+00	0.00012	1.0	9.5E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	1.0E-02	4.2E-01	2.1E+00	2.4E-02	4.8E-03
4,4'-DDT	1.6E+01	0.00012	1.0	4.6E-02	0.0042	1.5E-03	1.0	1.5E-04	0.0416	1.0	4.6E-02	4.2E-01	2.1E+00	1.1E-01	2.2E-02
Aldrin	***9.0E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.9E-03	2.8E-01	1.4E+00	1.0E-02	2.0E-03
alpha-BHC	***9.0E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.9E-03	2.3E+00	4.5E+00	1.3E-03	6.3E-04
alpha-Chlordane	***9.0E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.9E-03	4.6E+00	9.1E+00	6.2E-04	3.1E-04
beta-BHC	2.6E+01	0.00012	1.0	7.5E-02	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	7.5E-02	5.7E-01	2.8E+00	1.3E-01	2.7E-02
delta-BHC	7.4E-01	0.00012	1.0	2.1E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.4E-03	2.3E+00	4.5E+00	1.1E-03	5.3E-04
Dieldrin	***1.8E+00***	0.00012	1.0	5.2E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.7E-03	1.8E-02	1.8E-01	3.2E-01	3.2E-02
Endosulfan I	***9.0E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.9E-03	4.3E-01	4.3E+00	6.6E-03	6.6E-04
Endosulfan II	5.4E+00	0.00012	1.0	1.6E-02	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	1.6E-02	4.3E-01	4.3E+00	3.7E-02	3.7E-03
Endosulfan Sulfate	***1.8E+00***	0.00012	1.0	5.2E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.7E-03	4.3E-01	4.3E+00	1.3E-02	1.3E-03
Endrin	1.0E+01	0.00012	1.0	2.9E-02	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	2.9E-02	9.2E-02	9.2E-01	3.2E-01	3.2E-02
Endrin Aldehyde	***1.8E+00***	0.00012	1.0	5.2E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.7E-03	9.2E-02	9.2E-01	6.2E-02	6.2E-03
Endrin Ketone	***1.8E+00***	0.00012	1.0	5.2E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.7E-03	9.2E-02	9.2E-01	6.2E-02	6.2E-03
gamma-BHC (Lindane)	7.5E+00	0.00012	1.0	2.2E-02	0.0042	5.8E-03	1.0	5.8E-04	0.0416	1.0	2.2E-02	2.0E+01	2.0E+02	1.1E-03	1.1E-04
gamma-Chlordane	2.7E+00	0.00012	1.0	7.8E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	8.0E-03	4.6E+00	9.1E+00	1.8E-03	8.8E-04
Heptachlor	1.5E+00	0.00012	1.0	4.3E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	4.6E-03	7.4E-02	7.4E-01	6.2E-02	6.2E-03
Heptachlor Epoxide	***9.0E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.9E-03	1.0E-03	7.5E-03	2.8E+00	3.8E-01
Methoxychlor	***9.0E+00***	0.00012	1.0	2.6E-02	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	2.9E-02	2.3E+00	4.7E+00	1.2E-02	6.1E-03
Toxaphene	***9.0E+01***	0.00012	1.0	2.6E-01	0.0042	***2.6E-01***	1.0	2.6E-02	0.0416	1.0	2.9E-01	7.9E+00	7.9E+01	3.6E-02	3.6E-03
Herbicides															
2,4-D	1.7E+00	0.00012	1.0	4.8E-03	0.0042	***1.3E-02***	1.0	1.3E-03	0.0416	1.0	6.0E-03	1.6E+00	8.1E+00	3.7E-03	7.4E-04
2,4-DB	***4.8E-02***	0.00012	1.0	1.4E-04	0.0042	***1.3E-02***	1.0	1.3E-03	0.0416	1.0	1.4E-03	2.6E+00	8.3E+00	5.3E-04	1.7E-04
2,4,5-T	***9.0E+00***	0.00012	1.0	2.6E-02	0.0042	***1.3E-02***	1.0	1.3E-03	0.0416	1.0	2.7E-02	3.5E+00	1.2E+01	7.8E-03	2.4E-03
2,4,5-TP (Silvex)	1.3E-01	0.00012	1.0	3.7E-04	0.0042	***1.3E-02***	1.0	1.3E-03	0.0416	1.0	1.6E-03	1.1E+00	3.6E+00	1.5E-03	4.5E-04
Dalapon	***1.1E+01***	0.00012	1.0	3.1E-02	0.0042	***3.0E+00***	1.0	3.0E-01	0.0416	1.0	3.3E-01	9.8E+00	3.3E+01	3.4E-02	1.0E-02
Dicamba	1.1E-01	0.00012	1.0	3.1E-04	0.0042	***3.0E-02***	1.0	3.0E-03	0.0416	1.0	3.3E-03	3.7E+00	1.2E+01	8.9E-04	2.7E-04
Dichlorprop	***5.9E-01***	0.00012	1.0	1.7E-03	0.0042	***1.5E-01***	1.0	1.5E-02	0.0416	1.0	1.7E-02	2.0E-01	2.0E+00	8.4E-02	8.4E-03
Dinoseb	9.7E-01	0.00012	1.0	2.8E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.2E-01	1.2E+00	4.5E-01	4.5E-02
MCPA	***1.1E+01***	0.00012	1.0	3.3E-02	0.0042	5.1E+00	1.0	5.1E-01	0.0416	1.0	5.4E-01	2.2E-01	1.1E+00	2.5E+00	5.0E-01
MCPP	1.5E+01	0.00012	1.0	4.3E-02	0.0042	***3.0E+00***	1.0	3.0E-01	0.0416	1.0	3.4E-01	3.5E-01	1.0E+00	9.9E-01	3.3E-01
PCBs															
Total PCBs	1.0E+03	0.00012	1.0	2.9E+00	0.0042	***2.5E-02***	1.0	2.5E-03	0.0416	1.0	2.9E+00	1.2E-01	1.2E+00	2.5E+01	2.5E+00
Dioxins/Furans															
TEQ	1.2E-05	0.00012	1.0	3.6E-08	0.0042	3.7E-07	1.0	3.7E-08	0.0416	1.0	7.3E-08	1.2E-06	1.2E-05	6.3E-02	6.3E-03
Metals*															
Aluminum	8.4E+03	0.00012	1.0	2.4E+01	0.0042	9.5E+00	1.0	9.5E-01	0.0416	1.0	2.5E+01	1.9E+00	1.9E+01	1.3E+01	1.3E+00
Antimony	8.9E-01	0.00012	1.0	2.6E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.2E-01	1.2E+00	8.2E-01	8.2E-02
Arsenic	6.2E+00	0.00012	1.0	1.8E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.8E-02	1.3E-01	1.3E+00	5.4E-01	5.4E-02
Barium	1.2E+02	0.00012	1.0	3.3E-01	0.0042	5.4E+00	1.0	5.4E-01	0.0416	1.0	8.7E-01	9.4E+00	3.7E+01	9.3E-02	2.4E-02
Beryllium	4.7E-01	0.00012	1.0	1.4E-03	0.0042	***2.0E-01***	1.0	2.0E-02	0.0416	1.0	2.1E-02	7.6E-01	7.6E+00	2.8E-02	2.8E-03
Cadmium	8.1E-01	0.00012	1.0	2.3E-03	0.0042	***2.5E-01***	1.0	2.5E-02	0.0416	1.0	2.7E-02	3.9E+00	3.9E+01	7.1E-03	7.1E-04
Chromium	2.0E+01	0.00012	1.0	5.8E-02	0.0042	2.4E-01	1.0	2.4E-02	0.0416	1.0	8.2E-02	3.8E+00	1.5E+01	2.2E-02	5.4E-03
Cobalt	8.4E+00	0.00012	1.0	2.4E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.4E-02	5.8E-02	5.8E-01	1.3E+00	1.3E-01
Copper	2.2E+01	0.00012	1.0	6.2E-02	0.0042	3.8E+00	1.0	3.8E-01	0.0416	1.0	4.4E-01	1.4E+01	1.9E+01	3.1E-02	2.3E-02
Lead	4.5E+01	0.00012	1.0	1.3E-01	0.0042	9.9E-01	1.0	9.9E-02	0.0416	1.0	2.3E-01	9.2E+00	9.2E+01	2.5E-02	2.5E-03
Manganese	6.1E+02	0.00012	1.0	1.7E+00	0.0042	6.7E+00	1.0	6.7E-01	0.0416	1.0	2.4E+00	1.0E+02	3.3E+02	2.4E-02	7.4E-03
Mercury	6.9E-02	0.00012	1.0	2.0E-04	0.0042	1.3E+00	1.0	1.3E-01	0.0416	1.0	1.3E-01	7.6E-02	3.8E-01	1.7E+00	3.4E-01
Nickel	1.8E+01	0.00012	1.0	5.2E-02	0.0042	2.6E+00	1.0	2.6E-01	0.0416	1.0	3.1E-01	4.6E+01	9.2E+01	6.7E-03	3.4E-03
Selenium	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	1.9E-01	3.2E-01	2.7E-01	1.7E-01
Silver	***5.5E-01***	0.00012	1.0	1.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.8E-01	1.8E+00	2.9E-01	2.9E-02
Thallium	***1.0E+00***	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	1.2E-02	1.2E-01	4.5E+00	4.5E-01
Vanadium	2.6E+01	0.00012	1.0	7.4E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.2E-01	1.3E-01	1.3E+00	9.6E-01	9.6E-02
Zinc	9.4E+01	0.00012	1.0	2.7E-01	0.0042	1.7E+01	1.0	1.7E+00	0.0416	1.0	2.0E+00	2.3E+02	4.6E+02	8.6E-03	4.3E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-48
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site S (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	3.6E+01	0.00012	1.0	1.0E-01	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.5E-01	1.7E+01	6.2E+01	9.0E-03	2.5E-03
1,2-Dichlorobenzene	3.7E+01	0.00012	1.0	1.1E-01	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.6E-01	9.9E+01	1.4E+03	1.6E-03	1.1E-04
1,3-Dichlorobenzene	1.0E+00	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	9.9E+01	1.4E+03	5.3E-04	3.8E-05
1,4-Dichlorobenzene	7.5E+00	0.00012	1.0	2.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.1E-02	9.9E+01	1.7E+02	7.2E-04	4.1E-04
2,2'-Oxybis(1-Chloropropane)	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	3.6E+01	2.0E+02	2.0E-03	3.5E-04
2,4,5-Trichlorophenol	1.1E+00	0.00012	1.0	3.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	1.2E+01	3.5E+01	4.6E-03	1.5E-03
2,4,6-Trichlorophenol	8.2E+00	0.00012	1.0	2.4E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.3E-02	5.8E+02	3.5E+01	1.3E-04	2.1E-03
2,4-Dichlorophenol	2.3E+00	0.00012	1.0	6.6E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.6E-02	3.5E-01	3.5E+00	1.6E-01	1.6E-02
2,4-Dinitrophenol	***3.7E+01***	0.00012	1.0	1.1E-01	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.6E-01	1.6E-03	1.6E-02	2.3E+02	2.3E+01
2,4-Dinitrotoluene	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	2.9E-01	2.2E+00	2.4E-01	3.2E-02
2,6-Dinitrotoluene	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	8.1E-01	8.1E+00	8.6E-02	8.6E-03
2-Chloronaphthalene	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	2.5E+01	6.0E+01	2.8E-03	1.2E-03
2-Chlorophenol	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	5.8E+01	5.8E+00	1.2E-03	1.2E-02
2-Methylnaphthalene	1.1E+01	0.00012	1.0	3.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	8.1E-02	2.8E+03	2.8E+04	2.9E-05	2.9E-06
2-Methylphenol (o-Cresol)	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	2.7E+02	2.7E+03	2.6E-04	2.6E-05
2-Nitroaniline	4.6E+00	0.00012	1.0	1.3E-02	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.7E-01	4.9E+00	4.9E+01	5.5E-02	5.5E-03
2-Nitrophenol	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	2.9E+00	8.1E+00	2.4E-02	8.6E-03
3,3'-Dichlorobenzidine	***1.5E+01***	0.00012	1.0	4.2E-02	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.4E-01	1.5E+01	5.1E+02	9.5E-03	2.8E-04
3/4-Methylphenol (m&p-Cresol)	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	2.7E+02	2.7E+03	2.6E-04	2.6E-05
3-Nitroaniline	***3.7E+01***	0.00012	1.0	1.1E-01	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.6E-01	4.9E+00	4.9E+01	7.5E-02	7.5E-03
4,6-Dinitro-2-methylphenol	***3.7E+01***	0.00012	1.0	1.1E-01	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.6E-01	2.9E-01	5.3E+00	1.3E+00	6.9E-02
4-Bromophenyl Phenyl Ether	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	1.2E+00	9.2E+00	6.0E-02	7.5E-03
4-Chloro-3-methylphenol	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	1.3E+02	1.3E+03	5.4E-04	5.4E-05
4-Chloroaniline	***1.5E+01***	0.00012	1.0	4.2E-02	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.4E-01	1.4E+00	1.4E+01	9.8E-02	9.8E-03
4-Chlorophenyl Phenyl Ether	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	1.2E+00	9.2E+00	6.0E-02	7.5E-03
4-Nitroaniline	5.7E+01	0.00012	1.0	1.6E-01	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	4.2E-01	4.9E+00	4.9E+01	8.6E-02	8.6E-03
4-Nitrophenol	***3.7E+01***	0.00012	1.0	1.1E-01	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	3.6E-01	2.9E+00	8.1E+00	1.3E-01	4.5E-02
Acenaphthene	1.2E+00	0.00012	1.0	3.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	1.7E+01	3.5E+01	3.0E-03	1.5E-03
Acenaphthylene	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	1.7E+01	3.5E+01	4.0E-03	2.0E-03
Anthracene	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	1.0E+02	1.0E+03	7.0E-04	7.0E-05
Benzo(a)anthracene	8.0E+00	0.00012	1.0	2.3E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.3E-02	1.0E+00	1.0E+01	7.3E-02	7.3E-03
Benzo(a)pyrene	5.4E+00	0.00012	1.0	1.6E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.5E-02	1.0E+00	1.0E+01	6.5E-02	6.5E-03
Benzo(b)fluoranthene	6.6E+00	0.00012	1.0	1.9E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.9E-02	1.0E+00	1.0E+01	6.9E-02	6.9E-03
Benzo(g,h,i)perylene	4.2E+00	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.0E+00	1.0E+01	6.2E-02	6.2E-03
Benzo(k)fluoranthene	6.4E+00	0.00012	1.0	1.8E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.8E-02	1.0E+00	1.0E+01	6.8E-02	6.8E-03
bis(2-Chloroethoxy)methane	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	3.6E+01	2.0E+02	2.0E-03	3.5E-04
bis(2-Chloroethyl)ether	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	3.6E+01	2.0E+02	2.0E-03	3.5E-04
bis(2-Ethylhexyl)phthalate	3.9E+00	0.00012	1.0	1.1E-02	0.0042	8.2E-02	1.0	8.2E-03	0.0416	1.0	1.9E-02	1.9E+01	1.9E+02	1.0E-03	1.0E-04
Butyl Benzyl Phthalate	1.2E+02	0.00012	1.0	3.5E-01	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	4.0E-01	1.8E+01	5.4E+01	2.2E-02	7.3E-03
Carbazole	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	3.0E+00	3.0E+01	2.3E-02	2.3E-03
Chrysene	2.0E+01	0.00012	1.0	5.8E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.1E-01	1.0E+00	1.0E+01	1.1E-01	1.1E-02
Dibenzo(a,h)anthracene	1.8E+00	0.00012	1.0	5.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.5E-02	1.0E+00	1.0E+01	5.5E-02	5.5E-03
Dibenzofuran	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	1.5E-02	1.5E-01	4.6E+00	4.6E-01
Diethyl Phthalate	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	4.5E+03	4.5E+04	1.5E-05	1.5E-06
Dimethyl Phthalate	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	4.6E+03	4.6E+04	1.5E-05	1.5E-06
Di-n-butylphthalate	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	5.6E+02	1.9E+03	1.2E-04	3.7E-05
Di-n-octylphthalate	1.3E+00	0.00012	1.0	3.8E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	5.5E+02	1.8E+03	9.7E-05	2.9E-05
Fluoranthene	4.2E+00	0.00012	1.0	1.2E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.2E-02	1.2E+01	2.5E+01	4.9E-03	2.5E-03
Fluorene	1.2E+00	0.00012	1.0	3.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	1.2E+01	2.5E+01	4.2E-03	2.1E-03
Hexachlorobenzene	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	9.2E-02	3.4E-01	7.5E-01	2.1E-01
Hexachlorobutadiene	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	2.3E-01	2.3E-01	3.0E-01	3.0E-01
Hexachlorocyclopentadiene	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	6.9E-01	1.3E+00	1.0E-01	5.5E-02
Hexachloroethane	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	1.2E-01	1.7E+00	6.0E-01	4.0E-02
Indeno(1,2,3-cd)pyrene	1.3E+00	0.00012	1.0	3.8E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	1.0E+00	1.0E+01	5.3E-02	5.3E-03
Isophorone	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	2.2E+01	2.1E+02	3.2E-03	3.4E-04
Naphthalene	2.1E+00	0.00012	1.0	6.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.6E-02	8.2E+00	1.6E+01	6.8E-03	3.4E-03
Nitrobenzene	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	4.6E-02	4.6E-01	1.5E+00	1.5E-01
N-Nitroso-di-n-propylamine	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	1.0E-02	1.0E-01	7.0E+00	7.0E-01
N-Nitrosodiphenylamine	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	2.3E+02	5.8E+01	3.0E-04	1.2E-03
Pentachlorophenol	4.4E+02	0.00012	1.0	1.3E+00	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	1.3E+00	3.7E-01	3.7E+00	3.4E+00	3.4E-01
Phenanthrene	9.2E+00	0.00012	1.0	2.7E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.6E-02	1.7E+01	3.5E+01	4.4E-03	2.2E-03
Phenol	***7.0E+00***	0.00012	1.0	2.0E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.0E-02	6.9E+01	1.4E+02	1.0E-03	5.0E-04
Pyrene	2.8E+01	0.00012	1.0	8.1E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.3E-01	7.5E+00	1.2E+01	1.7E-02	1.0E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workpla
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-48
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site S (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	1.7E+00	0.00012	1.0	4.9E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.4E-03	4.2E-01	2.1E+00	1.3E-02	2.6E-03
4,4'-DDE	3.3E+00	0.00012	1.0	9.5E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	1.0E-02	4.2E-01	2.1E+00	2.4E-02	4.8E-03
4,4'-DDT	1.6E+01	0.00012	1.0	4.6E-02	0.0042	1.5E-03	1.0	1.5E-04	0.0416	1.0	4.6E-02	4.2E-01	2.1E+00	1.1E-01	2.2E-02
Aldrin	***9.0E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.9E-03	2.8E-01	1.4E+00	1.0E-02	2.0E-03
alpha-BHC	***9.0E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.9E-03	2.3E+00	4.5E+00	1.3E-03	6.3E-04
alpha-Chlordane	***9.0E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.9E-03	4.6E+00	9.1E+00	6.2E-04	3.1E-04
beta-BHC	2.6E+01	0.00012	1.0	7.5E-02	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	7.5E-02	5.7E-01	2.8E+00	1.3E-01	2.7E-02
delta-BHC	7.4E-01	0.00012	1.0	2.1E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.4E-03	2.3E+00	4.5E+00	1.1E-03	5.3E-04
Dieldrin	***1.8E+00***	0.00012	1.0	5.2E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.7E-03	1.8E-02	1.8E-01	3.2E-01	3.2E-02
Endosulfan I	***9.0E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.9E-03	4.3E-01	4.3E+00	6.6E-03	6.6E-04
Endosulfan II	5.4E+00	0.00012	1.0	1.6E-02	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	1.6E-02	4.3E-01	4.3E+00	3.7E-02	3.7E-03
Endosulfan Sulfate	***1.8E+00***	0.00012	1.0	5.2E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.7E-03	4.3E-01	4.3E+00	1.3E-02	1.3E-03
Endrin	1.0E+01	0.00012	1.0	2.9E-02	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	2.9E-02	9.2E-02	9.2E-01	3.2E-01	3.2E-02
Endrin Aldehyde	***1.8E+00***	0.00012	1.0	5.2E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.7E-03	9.2E-02	9.2E-01	6.2E-02	6.2E-03
Endrin Ketone	***1.8E+00***	0.00012	1.0	5.2E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.7E-03	9.2E-02	9.2E-01	6.2E-02	6.2E-03
gamma-BHC (Lindane)	7.5E+00	0.00012	1.0	2.2E-02	0.0042	5.8E-03	1.0	5.8E-04	0.0416	1.0	2.2E-02	2.0E+01	2.0E+02	1.1E-03	1.1E-04
gamma-Chlordane	2.7E+00	0.00012	1.0	7.8E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	8.0E-03	4.6E+00	9.1E+00	1.8E-03	8.8E-04
Heptachlor	1.5E+00	0.00012	1.0	4.3E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	4.6E-03	7.4E-02	7.4E-01	6.2E-02	6.2E-03
Heptachlor Epoxide	***9.0E-01***	0.00012	1.0	2.6E-03	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.9E-03	1.0E-03	7.5E-03	2.8E+00	3.8E-01
Methoxychlor	***9.0E+00***	0.00012	1.0	2.6E-02	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	2.9E-02	2.3E+00	4.7E+00	1.2E-02	6.1E-03
Toxaphene	***9.0E+01***	0.00012	1.0	2.6E-01	0.0042	***2.6E-01***	1.0	2.6E-02	0.0416	1.0	2.9E-01	7.9E+00	7.9E+01	3.6E-02	3.6E-03
Herbicides															
2,4-D	3.3E+00	0.00012	1.0	9.5E-03	0.0042	***1.3E-02***	1.0	1.3E-03	0.0416	1.0	1.1E-02	1.6E+00	8.1E+00	6.7E-03	1.3E-03
2,4-DB	***9.0E-02***	0.00012	1.0	2.6E-04	0.0042	***1.3E-02***	1.0	1.3E-03	0.0416	1.0	1.5E-03	2.6E+00	8.3E+00	5.7E-04	1.8E-04
2,4,5-T	***1.8E+01***	0.00012	1.0	5.2E-02	0.0042	***1.3E-02***	1.0	1.3E-03	0.0416	1.0	5.3E-02	3.5E+00	1.2E+01	1.5E-02	4.6E-03
2,4,5-TP (Silvex)	2.5E-01	0.00012	1.0	7.2E-04	0.0042	***1.3E-02***	1.0	1.3E-03	0.0416	1.0	2.0E-03	1.1E+00	3.6E+00	1.8E-03	5.5E-04
Dalapon	***2.2E+01***	0.00012	1.0	6.2E-02	0.0042	***3.0E+00***	1.0	3.0E-01	0.0416	1.0	3.6E-01	9.8E+00	3.3E+01	3.7E-02	1.1E-02
Dicamba	***2.2E-01***	0.00012	1.0	6.2E-04	0.0042	***3.0E-02***	1.0	3.0E-03	0.0416	1.0	3.6E-03	3.7E+00	1.2E+01	9.7E-04	2.9E-04
Dichlorprop	***1.1E+00***	0.00012	1.0	3.2E-03	0.0042	***1.5E-01***	1.0	1.5E-02	0.0416	1.0	1.8E-02	2.0E-01	2.0E+00	9.1E-02	9.1E-03
Dinoseb	1.7E+00	0.00012	1.0	4.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.4E-02	1.2E-01	1.2E+00	4.7E-01	4.7E-02
MCPA	***2.2E+01***	0.00012	1.0	6.2E-02	0.0042	5.1E+00	1.0	5.1E-01	0.0416	1.0	5.7E-01	2.2E-01	1.1E+00	2.7E+00	5.3E-01
MCPP	***2.2E+01***	0.00012	1.0	6.2E-02	0.0042	***3.0E+00***	1.0	3.0E-01	0.0416	1.0	3.6E-01	3.5E-01	1.0E+00	1.0E+00	3.5E-01
PCBs															
Total PCBs	1.0E+03	0.00012	1.0	2.9E+00	0.0042	***2.5E-02***	1.0	2.5E-03	0.0416	1.0	2.9E+00	1.2E-01	1.2E+00	2.5E+01	2.5E+00
Dioxins/Furans															
TEQ	1.2E-05	0.00012	1.0	3.6E-08	0.0042	3.7E-07	1.0	3.7E-08	0.0416	1.0	7.3E-08	1.2E-06	1.2E-05	6.3E-02	6.3E-03
Metals*															
Aluminum	9.4E+03	0.00012	1.0	2.7E+01	0.0042	9.5E+00	1.0	9.5E-01	0.0416	1.0	2.8E+01	1.9E+00	1.9E+01	1.5E+01	1.5E+00
Antimony	***1.2E+00***	0.00012	1.0	3.5E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.2E-01	1.2E+00	8.3E-01	8.3E-02
Arsenic	6.6E+00	0.00012	1.0	1.9E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.9E-02	1.3E-01	1.3E+00	5.5E-01	5.5E-02
Barium	1.2E+02	0.00012	1.0	3.5E-01	0.0042	5.4E+00	1.0	5.4E-01	0.0416	1.0	8.9E-01	9.4E+00	3.7E+01	9.4E-02	2.4E-02
Beryllium	4.8E-01	0.00012	1.0	1.4E-03	0.0042	***2.0E-01***	1.0	2.0E-02	0.0416	1.0	2.1E-02	7.6E-01	7.6E+00	2.8E-02	2.8E-03
Cadmium	8.5E-01	0.00012	1.0	2.5E-03	0.0042	***2.5E-01***	1.0	2.5E-02	0.0416	1.0	2.7E-02	3.9E+00	3.9E+01	7.1E-03	7.1E-04
Chromium	2.3E+01	0.00012	1.0	6.6E-02	0.0042	2.4E-01	1.0	2.4E-02	0.0416	1.0	9.0E-02	3.8E+00	1.5E+01	2.4E-02	5.9E-03
Cobalt	9.4E+00	0.00012	1.0	2.7E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	7.7E-02	5.8E-02	5.8E-01	1.3E+00	1.3E-01
Copper	2.3E+01	0.00012	1.0	6.6E-02	0.0042	3.8E+00	1.0	3.8E-01	0.0416	1.0	4.5E-01	1.4E+01	1.9E+01	3.1E-02	2.4E-02
Lead	6.3E+01	0.00012	1.0	1.8E-01	0.0042	9.9E-01	1.0	9.9E-02	0.0416	1.0	2.8E-01	9.2E+00	9.2E+01	3.0E-02	3.0E-03
Manganese	6.7E+02	0.00012	1.0	1.9E+00	0.0042	6.7E+00	1.0	6.7E-01	0.0416	1.0	2.6E+00	1.0E+02	3.3E+02	2.6E-02	7.9E-03
Mercury	7.4E-02	0.00012	1.0	2.1E-04	0.0042	1.3E+00	1.0	1.3E-01	0.0416	1.0	1.3E-01	7.6E-02	3.8E-01	1.7E+00	3.4E-01
Nickel	2.0E+01	0.00012	1.0	5.8E-02	0.0042	2.6E+00	1.0	2.6E-01	0.0416	1.0	3.2E-01	4.6E+01	9.2E+01	6.9E-03	3.4E-03
Selenium	***1.5E+00***	0.00012	1.0	4.3E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.4E-02	1.9E-01	3.2E-01	2.8E-01	1.7E-01
Silver	***6.0E-01***	0.00012	1.0	1.7E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.8E-01	1.8E+00	2.9E-01	2.9E-02
Thallium	***1.5E+00***	0.00012	1.0	4.3E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.4E-02	1.2E-02	1.2E-01	4.6E+00	4.6E-01
Vanadium	2.7E+01	0.00012	1.0	7.8E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.3E-01	1.3E-01	1.3E+00	9.9E-01	9.9E-02
Zinc	1.1E+02	0.00012	1.0	3.2E-01	0.0042	1.7E+01	1.0	1.7E+00	0.0416	1.0	2.0E+00	2.3E+02	4.6E+02	8.8E-03	4.4E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-49
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site S (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs																(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	1.8E+01	0.0012	1.0	1.4E+00	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.9E+00	1.8E+01	6.5E+01	1.1E-01	3.0E-02
1,2-Dichlorobenzene	1.9E+01	0.0012	1.0	1.5E+00	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	2.0E+00	1.0E+02	1.4E+03	1.9E-02	1.3E-03
1,3-Dichlorobenzene	6.2E-01	0.0012	1.0	4.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.5E-01	1.0E+02	1.4E+03	5.3E-03	3.8E-04
1,4-Dichlorobenzene	3.9E+00	0.0012	1.0	3.0E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.0E-01	1.0E+02	1.8E+02	7.7E-03	4.4E-03
2,2'-Oxybis(1-Chloropropane)	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	3.7E+01	2.1E+02	2.1E-02	3.8E-03
2,4,5-Trichlorophenol	6.7E-01	0.0012	1.0	5.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.5E-01	1.2E+01	3.6E+01	4.6E-02	1.5E-02
2,4,6-Trichlorophenol	4.2E+00	0.0012	1.0	3.3E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.3E-01	6.0E+02	3.6E+01	1.4E-03	2.3E-02
2,4-Dichlorophenol	1.3E+00	0.0012	1.0	9.9E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.0E-01	3.6E-01	3.6E+00	1.7E+00	1.7E-01
2,4-Dinitrophenol	***1.9E+01***	0.0012	1.0	1.5E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	4.0E+00	1.6E-03	1.6E-02	2.4E+03	2.4E+02
2,4-Dinitrotoluene	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	3.0E-01	2.2E+00	2.6E+00	3.5E-01
2,6-Dinitrotoluene	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	8.5E-01	8.5E+00	9.2E-01	9.2E-02
2-Chloronaphthalene	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	2.6E+01	6.3E+01	3.0E-02	1.3E-02
2-Chlorophenol	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	6.0E+01	6.0E+00	1.3E-02	1.3E-01
2-Methylnaphthalene	5.6E+00	0.0012	1.0	4.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	9.4E-01	3.0E+03	3.0E+04	3.2E-04	3.2E-05
2-Methylphenol (o-Cresol)	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	2.8E+02	2.8E+03	2.8E-03	2.8E-04
2-Nitroaniline	2.9E+00	0.0012	1.0	2.3E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.7E+00	5.1E+00	5.1E+01	5.4E-01	5.4E-02
2-Nitrophenol	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	3.0E+00	8.5E+00	2.6E-01	9.2E-02
3,3'-Dichlorobenzidine	***7.5E+00***	0.0012	1.0	5.8E-01	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.6E+00	1.6E+01	5.3E+02	1.0E-01	3.0E-03
3/4-Methylphenol (m&p-Cresol)	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	2.8E+02	2.8E+03	2.8E-03	2.8E-04
3-Nitroaniline	***1.9E+01***	0.0012	1.0	1.5E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	4.0E+00	5.1E+00	5.1E+01	7.9E-01	7.9E-02
4,6-Dinitro-2-methylphenol	***1.9E+01***	0.0012	1.0	1.5E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	4.0E+00	3.0E-01	5.5E+00	1.3E+01	7.3E-01
4-Bromophenyl Phenyl Ether	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	1.2E+00	9.7E+00	6.5E-01	8.1E-02
4-Chloro-3-methylphenol	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	1.4E+02	1.4E+03	5.8E-03	5.8E-04
4-Chloroaniline	***7.5E+00***	0.0012	1.0	5.8E-01	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.6E+00	1.5E+00	1.5E+01	1.0E+00	1.0E-01
4-Chlorophenyl Phenyl Ether	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	1.2E+00	9.7E+00	6.5E-01	8.1E-02
4-Nitroaniline	2.9E+01	0.0012	1.0	2.3E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	4.8E+00	5.1E+00	5.1E+01	9.4E-01	9.4E-02
4-Nitrophenol	***1.9E+01***	0.0012	1.0	1.5E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	4.0E+00	3.0E+00	8.5E+00	1.3E+00	4.7E-01
Acenaphthene	7.2E-01	0.0012	1.0	5.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.6E-01	1.8E+01	3.6E+01	3.0E-02	1.5E-02
Acenaphthylene	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	1.8E+01	3.6E+01	4.3E-02	2.1E-02
Anthracene	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	1.0E+02	1.0E+03	7.5E-03	7.5E-04
Benzo(a)anthracene	4.1E+00	0.0012	1.0	3.2E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.2E-01	1.0E+00	1.0E+01	7.9E-01	7.9E-02
Benzo(a)pyrene	2.8E+00	0.0012	1.0	2.2E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.2E-01	1.0E+00	1.0E+01	6.9E-01	6.9E-02
Benzo(b)fluoranthene	3.4E+00	0.0012	1.0	2.7E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.7E-01	1.0E+00	1.0E+01	7.4E-01	7.4E-02
Benzo(g,h,i)perylene	2.2E+00	0.0012	1.0	1.7E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.7E-01	1.0E+00	1.0E+01	6.5E-01	6.5E-02
Benzo(k)fluoranthene	3.3E+00	0.0012	1.0	2.6E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.6E-01	1.0E+00	1.0E+01	7.3E-01	7.3E-02
bis(2-Chloroethoxy)methane	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	3.7E+01	2.1E+02	2.1E-02	3.8E-03
bis(2-Chloroethyl)ether	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	3.7E+01	2.1E+02	2.1E-02	3.8E-03
bis(2-Ethylhexyl)phthalate	2.2E+00	0.0012	1.0	1.7E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.7E-01	1.3E+01	1.3E+02	5.3E-02	5.3E-03
Butyl Benzyl Phthalate	6.0E+01	0.0012	1.0	4.7E+00	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E+00	1.9E+01	5.7E+01	2.7E-01	9.1E-02
Carbazole	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	3.1E+00	3.1E+01	2.5E-01	2.5E-02
Chrysene	1.0E+01	0.0012	1.0	7.9E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.3E+00	1.0E+00	1.0E+01	1.2E+00	1.2E-01
Dibenzo(a,h)anthracene	1.0E+00	0.0012	1.0	7.9E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+00	1.0E+01	5.6E-01	5.6E-02
Dibenzofuran	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	1.6E-02	1.6E-01	4.9E+01	4.9E+00
Diethyl Phthalate	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	5.6E+03	5.6E+04	1.4E-04	1.4E-05
Dimethyl Phthalate	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	4.8E+03	4.8E+04	1.6E-04	1.6E-05
Di-n-butylphthalate	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	4.3E+02	1.4E+03	1.8E-03	5.4E-04
Di-n-octylphthalate	7.7E-01	0.0012	1.0	6.0E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.6E-01	5.7E+02	1.9E+03	9.8E-04	2.9E-04
Fluoranthene	2.2E+00	0.0012	1.0	1.7E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.7E-01	1.3E+01	2.6E+01	5.2E-02	2.6E-02
Fluorene	7.2E-01	0.0012	1.0	5.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.6E-01	1.3E+01	2.6E+01	4.3E-02	2.1E-02
Hexachlorobenzene	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	9.7E-02	3.5E-01	8.1E+00	2.2E+00
Hexachlorobutadiene	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	2.4E-01	2.4E-01	3.2E+00	3.2E+00
Hexachlorocyclopentadiene	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	7.2E-01	1.3E+00	1.1E+00	5.9E-01
Hexachloroethane	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	1.2E-01	1.8E+00	6.5E+00	4.3E-01
Indeno(1,2,3-cd)pyrene	7.7E-01	0.0012	1.0	6.0E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.6E-01	1.0E+00	1.0E+01	5.4E-01	5.4E-02
Isophorone	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	2.2E+01	2.2E+02	3.5E-02	3.6E-03
Naphthalene	1.2E+00	0.0012	1.0	9.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.9E-01	8.6E+00	1.7E+01	6.9E-02	3.4E-02
Nitrobenzene	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	4.8E-02	4.8E-01	1.6E+01	1.6E+00
N-Nitroso-di-n-propylamine	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	1.0E-02	1.0E-01	7.5E+01	7.5E+00
N-Nitrosodiphenylamine	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	2.4E+02	6.0E+01	3.2E-03	1.3E-02
Pentachlorophenol	2.2E+02	0.0012	1.0	1.7E+01	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	1.7E+01	4.3E-01	4.3E+00	4.0E+01	4.0E+00
Phenanthrene	4.7E+00	0.0012	1.0	3.7E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.7E-01	1.8E+01	3.6E+01	4.8E-02	2.4E-02
Phenol	***3.6E+00***	0.0012	1.0	2.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	7.8E-01	7.2E+01	1.4E+02	1.1E-02	5.4E-03
Pyrene	1.4E+01	0.0012	1.0	1.1E+00	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.6E+00	7.8E+00	1.3E+01	2.0E-01	1.2E-01

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-49
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site S (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																NOAEL	LOAEL	NOAEL HQ	LOAEL HQ
Pesticides																			
4,4'-DDD	1.7E+00	0.0012	1.0	1.3E-01	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.4E-01	3.4E-01	1.7E+00	4.1E-01	8.2E-02
4,4'-DDE	3.3E+00	0.0012	1.0	2.6E-01	0.0090	4.4E-03	1.0	0.67	1.8E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	2.6E-01	3.4E-01	1.7E+00	7.6E-01	1.5E-01
4,4'-DDT	1.6E+01	0.0012	1.0	1.2E+00	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.3E+00	3.4E-01	1.7E+00	3.7E+00	7.3E-01
Aldrin	***9.0E-01***	0.0012	1.0	7.0E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.9E-03	0.33	3.7E-04	0.015	1.0	7.5E-02	3.1E-01	1.6E+00	2.4E-01	4.8E-02
alpha-BHC	***9.0E-01***	0.0012	1.0	7.0E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	7.5E-02	2.5E+00	5.1E+00	3.0E-02	1.5E-02
alpha-Chlordane	***9.0E-01***	0.0012	1.0	7.0E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	7.5E-02	5.2E+00	1.0E+01	1.4E-02	7.2E-03
beta-BHC	2.6E+01	0.0012	1.0	2.0E+00	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	2.0E+00	6.3E-01	3.2E+00	3.2E+00	6.4E-01
delta-BHC	7.4E-01	0.0012	1.0	5.8E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	6.2E-02	2.5E+00	5.1E+00	2.5E-02	1.2E-02
Dieldrin	***1.8E+00***	0.0012	1.0	1.4E-01	0.0090	4.5E-03	1.0	0.67	1.8E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.4E-01	1.7E-02	1.7E-01	8.5E+00	8.5E-01
Endosulfan I	***9.0E-01***	0.0012	1.0	7.0E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	7.5E-02	5.9E-01	5.9E+00	1.3E-01	1.3E-02
Endosulfan II	5.4E+00	0.0012	1.0	4.2E-01	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	4.3E-01	5.9E-01	5.9E+00	7.2E-01	7.2E-02
Endosulfan Sulfate	***1.8E+00***	0.0012	1.0	1.4E-01	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.5E-01	5.9E-01	5.9E+00	2.5E-01	2.5E-02
Endrin	1.0E+01	0.0012	1.0	7.8E-01	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	7.9E-01	9.4E-02	9.4E-01	8.4E+00	8.4E-01
Endrin Aldehyde	***1.8E+00***	0.0012	1.0	1.4E-01	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.5E-01	9.4E-02	9.4E-01	1.6E+00	1.6E-01
Endrin Ketone	***1.8E+00***	0.0012	1.0	1.4E-01	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	4.2E-03	0.33	8.3E-04	0.015	1.0	1.5E-01	9.4E-02	9.4E-01	1.6E+00	1.6E-01
gamma-BHC (Lindane)	7.5E+00	0.0012	1.0	5.9E-01	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	5.9E-01	2.7E+01	2.7E+02	2.2E-02	2.2E-03
gamma-Chlordane	2.7E+00	0.0012	1.0	2.1E-01	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.6E-03	0.33	3.2E-04	0.015	1.0	2.1E-01	5.2E+00	1.0E+01	4.2E-02	2.1E-02
Heptachlor	1.5E+00	0.0012	1.0	1.2E-01	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.7E-03	0.33	3.4E-04	0.015	1.0	1.2E-01	7.0E-02	7.0E-01	1.7E+00	1.7E-01
Heptachlor Epoxide	***9.0E-01***	0.0012	1.0	7.0E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	7.5E-02	9.5E-04	7.0E-03	7.8E+01	1.1E+01
Methoxychlor	***9.0E+00***	0.0012	1.0	7.0E-01	0.0090	***1.0E-01***	1.0	0.67	4.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	7.5E-01	2.0E+00	4.0E+00	3.8E-01	1.9E-01
Toxaphene	***9.0E+01***	0.0012	1.0	7.0E+00	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***2.6E-01***	0.33	5.0E-02	0.015	1.0	7.5E+00	7.9E+00	7.9E+01	9.4E-01	9.4E-02
Herbicides																			
2,4-D	1.7E+00	0.0012	1.0	1.3E-01	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	1.1E-01	0.33	2.2E-02	0.015	1.0	1.6E-01	1.9E+00	9.4E+00	8.6E-02	1.7E-02
2,4-DB	***4.8E-02***	0.0012	1.0	3.7E-03	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	2.0E-02	0.33	4.0E-03	0.015	1.0	1.8E-02	3.1E+00	9.6E+00	5.8E-03	1.9E-03
2,4,5-T	***9.0E+00***	0.0012	1.0	7.0E-01	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	7.1E-01	3.6E+00	1.2E+01	2.0E-01	5.9E-02
2,4,5-TP (Silvex)	1.3E-01	0.0012	1.0	1.0E-02	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	2.3E-02	1.1E+00	3.7E+00	2.0E-02	6.0E-03
Dalapon	***1.1E+01***	0.0012	1.0	8.5E-01	0.0090	***6.0E+00***	1.0	0.67	2.4E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.9E+00	1.0E+01	3.5E+01	3.8E-01	1.1E-01
Dicamba	1.1E-01	0.0012	1.0	8.5E-03	0.0090	***6.0E-02***	1.0	0.67	2.4E-02	***3.0E-02***	0.33	5.9E-03	0.015	1.0	3.9E-02	3.9E+00	1.3E+01	9.9E-03	3.0E-03
Dichlorprop	***5.9E-01***	0.0012	1.0	4.6E-02	0.0090	***3.0E-01***	1.0	0.67	1.2E-01	***1.5E-01***	0.33	3.0E-02	0.015	1.0	2.0E-01	2.1E-01	2.1E+00	9.4E-01	9.4E-02
Dinoseb	9.7E-01	0.0012	1.0	7.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.2E-01	1.2E+00	4.8E+00	4.8E-01
MCPA	***1.1E+01***	0.0012	1.0	8.9E-01	0.0090	8.0E+01	1.0	0.67	3.2E+01	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.4E+01	2.2E-01	1.1E+00	1.5E+02	3.0E+01
MCPP	1.5E+01	0.0012	1.0	1.2E+00	0.0090	***6.0E+00***	1.0	0.67	2.4E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	4.2E+00	3.6E-01	1.1E+00	1.2E+01	3.8E+00
PCBs																			
Total PCBs	1.0E+03	0.0012	1.0	7.9E+01	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***2.5E-02***	0.33	5.0E-03	0.015	1.0	7.9E+01	1.2E-01	1.2E+00	6.5E+02	6.5E+01
Dioxins/Furans																			
TEQ	1.2E-05	0.0012	1.0	9.6E-07	0.0090	5.0E-06	1.0	0.67	2.0E-06	1.3E-05	0.33	2.7E-06	0.015	1.0	5.6E-06	1.2E-06	1.2E-05	4.6E+00	4.6E-01
Metals*																			
Aluminum	8.4E+03	0.0012	1.0	6.5E+02	0.0090	7.9E+02	1.0	0.67	3.2E+02	1.5E+01	0.33	3.0E+00	0.015	1.0	9.7E+02	2.0E+00	2.0E+01	4.8E+02	4.8E+01
Antimony	8.9E-01	0.0012	1.0	6.9E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	6.7E-01	1.3E-01	1.3E+00	5.1E+00	5.1E-01
Arsenic	6.2E+00	0.0012	1.0	4.8E-01	0.0090	5.8E+00	1.0	0.67	2.3E+00	***5.0E-01***	0.33	9.9E-02	0.015	1.0	2.9E+00	1.4E-01	1.4E+00	2.1E+01	2.1E+00
Barium	1.2E+02	0.0012	1.0	9.0E+00	0.0090	1.3E+01	1.0	0.67	5.2E+00	1.9E+00	0.33	3.8E-01	0.015	1.0	1.5E+01	1.1E+01	4.4E+01	1.3E+00	3.3E-01
Beryllium	4.7E-01	0.0012	1.0	3.7E-02	0.0090	***2.0E-01***	1.0	0.67	8.0E-02	***2.0E-01***	0.33	4.0E-02	0.015	1.0	1.6E-01	8.0E-01	8.0E+00	2.0E-01	2.0E-02
Cadmium	8.1E-01	0.0012	1.0	6.3E-02	0.0090	1.7E+00	1.0	0.67	6.8E-01	3.6E-01	0.33	7.1E-02	0.015	1.0	8.2E-01	5.8E+00	5.8E+01	1.4E-01	1.4E-02
Chromium	2.0E+01	0.0012	1.0	1.6E+00	0.0090	1.6E+00	1.0	0.67	6.4E-01	2.0E-01	0.33	4.0E-02	0.015	1.0	2.2E+00	4.0E+00	1.6E+01	5.7E-01	1.4E-01
Cobalt	8.4E+00	0.0012	1.0	6.5E-01	0.0090	1.8E+00	1.0	0.67	7.2E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	1.5E+00	6.0E-02	6.0E-01	2.4E+01	2.4E+00
Copper	2.2E+01	0.0012	1.0	1.7E+00	0.0090	5.6E+00	1.0	0.67	2.3E+00	2.0E+01	0.33	4.0E+00	0.015	1.0	7.9E+00	1.5E+01	2.0E+01	5.2E-01	4.0E-01
Lead	4.5E+01	0.0012	1.0	3.5E+00	0.0090	3.8E+00	1.0	0.67	1.5E+00	1.0E+00	0.33	2.0E-01	0.015	1.0	5.2E+00	9.7E+00	9.7E+01	5.4E-01	5.4E-02
Manganese	6.1E+02	0.0012	1.0	4.7E+01	0.0090	4.8E+01	1.0	0.67	1.9E+01	5.5E+00	0.33	1.1E+00	0.015	1.0	6.8E+01	1.1E+02	3.4E+02	6.4E-01	2.0E-01
Mercury	6.9E-02	0.0012	1.0	5.3E-03	0.0090	7.8E-02	1.0	0.67	3.1E-02	1.3E-01	0.33	2.6E-02	0.015	1.0	6.2E-02	9.9E-02	4.9E-01	6.3E-01	1.3E-01
Nickel	1.8E+01	0.0012	1.0	1.4E+00	0.0090	1.4E+00	1.0	0.67	5.6E-01	***2.0E+00***	0.33	4.0E-01	0.015	1.0	2.4E+00	4.8E+01	9.7E+01	4.9E-02	2.4E-02
Selenium	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.8E-01	1.9E-01	3.2E-01	2.0E+00	1.2E+00
Silver	***5.5E-01***	0.0012	1.0	4.3E-02	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.4E-01	1.9E-01	1.9E+00	1.8E+00	1.8E-01
Thallium	***1.0E+00***	0.0012	1.0	7.8E-02	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.8E-01	1.4E-02	1.4E-01	2.8E+01	2.8E+00
Vanadium	2.6E+01	0.0012	1.0	2.0E+00	0.0090	2.5E+00	1.0	0.67	1.0E+00	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.1E+00	1.1E-01	1.1E+00	2.8E+01	2.8E+00
Zinc	9.4E+01	0.0012	1.0	7.3E+00	0.0090	3.2E+01	1.0	0.67	1.3E+01	5.6E+01	0.33	1.1E+01	0.015	1.0	3.1E+01	2.6E+02	5.1E+02	1.2E-01	6.1E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

Table 7-50
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site S (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs																(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	3.6E+01	0.0012	1.0	2.8E+00	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	3.3E+00	1.8E+01	6.5E+01	1.9E-01	5.1E-02
1,2-Dichlorobenzene	3.7E+01	0.0012	1.0	2.9E+00	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	3.4E+00	1.0E+02	1.4E+03	3.3E-02	2.3E-03
1,3-Dichlorobenzene	1.0E+00	0.0012	1.0	7.8E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+02	1.4E+03	5.6E-03	4.0E-04
1,4-Dichlorobenzene	7.5E+00	0.0012	1.0	5.9E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.1E+00	1.0E+02	1.8E+02	1.0E-02	6.0E-03
2,2'-Oxybis(1-Chloropropane)	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	3.7E+01	2.1E+02	2.8E-02	5.1E-03
2,4,5-Trichlorophenol	1.1E+00	0.0012	1.0	8.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.9E-01	1.2E+01	3.6E+01	4.8E-02	1.6E-02
2,4,6-Trichlorophenol	8.2E+00	0.0012	1.0	6.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.1E+00	6.0E+02	3.6E+01	1.9E-03	3.1E-02
2,4-Dichlorophenol	2.3E+00	0.0012	1.0	1.8E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.8E-01	3.6E-01	3.6E+00	1.9E+00	1.9E-01
2,4-Dinitrophenol	***3.7E+01***	0.0012	1.0	2.9E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	5.4E+00	1.6E-03	1.6E-02	3.3E+03	3.3E+02
2,4-Dinitrotoluene	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	3.0E-01	2.2E+00	3.5E+00	4.7E-01
2,6-Dinitrotoluene	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	8.5E-01	8.5E+00	1.2E+00	1.2E-01
2-Chloronaphthalene	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	2.6E+01	6.3E+01	4.0E-02	1.7E-02
2-Chlorophenol	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	6.0E+01	6.0E+00	1.7E-02	1.7E-01
2-Methylnaphthalene	1.1E+01	0.0012	1.0	8.6E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.4E+00	3.0E+03	3.0E+04	4.6E-04	4.6E-05
2-Methylphenol (o-Cresol)	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	2.8E+02	2.8E+03	3.7E-03	3.7E-04
2-Nitroaniline	4.6E+00	0.0012	1.0	3.6E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.9E+00	5.1E+00	5.1E+01	5.7E-01	5.7E-02
2-Nitrophenol	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	3.0E+00	8.5E+00	3.5E-01	1.2E-01
3,3'-Dichlorobenzidine	***1.5E+01***	0.0012	1.0	1.1E+00	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	2.1E+00	1.6E+01	5.3E+02	1.4E-01	4.0E-03
3/4-Methylphenol (m&p-Cresol)	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	2.8E+02	2.8E+03	3.7E-03	3.7E-04
3-Nitroaniline	***3.7E+01***	0.0012	1.0	2.9E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	5.4E+00	5.1E+00	5.1E+01	1.1E+00	1.1E-01
4,6-Dinitro-2-methylphenol	***3.7E+01***	0.0012	1.0	2.9E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	5.4E+00	3.0E-01	5.5E+00	1.8E+01	9.8E-01
4-Bromophenyl Phenyl Ether	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	1.2E+00	9.7E+00	8.7E-01	1.1E-01
4-Chloro-3-methylphenol	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	1.4E+02	1.4E+03	7.7E-03	7.7E-04
4-Chloroaniline	***1.5E+01***	0.0012	1.0	1.1E+00	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	2.1E+00	1.5E+00	1.5E+01	1.4E+00	1.4E-01
4-Chlorophenyl Phenyl Ether	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	1.2E+00	9.7E+00	8.7E-01	1.1E-01
4-Nitroaniline	5.7E+01	0.0012	1.0	4.4E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	7.0E+00	5.1E+00	5.1E+01	1.4E+00	1.4E-01
4-Nitrophenol	***3.7E+01***	0.0012	1.0	2.9E+00	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	5.4E+00	3.0E+00	8.5E+00	1.8E+00	6.4E-01
Acenaphthene	1.2E+00	0.0012	1.0	9.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.9E-01	1.8E+01	3.6E+01	3.3E-02	1.6E-02
Acenaphthylene	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	1.8E+01	3.6E+01	5.7E-02	2.9E-02
Anthracene	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	1.0E+02	1.0E+03	1.0E-02	1.0E-03
Benzo(a)anthracene	8.0E+00	0.0012	1.0	6.2E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.1E+00	1.0E+00	1.0E+01	1.1E+00	1.1E-01
Benzo(a)pyrene	5.4E+00	0.0012	1.0	4.2E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	9.2E-01	1.0E+00	1.0E+01	8.8E-01	8.8E-02
Benzo(b)fluoranthene	6.6E+00	0.0012	1.0	5.1E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	1.0E+00	1.0E+01	9.7E-01	9.7E-02
Benzo(g,h,i)perylene	4.2E+00	0.0012	1.0	3.3E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.3E-01	1.0E+00	1.0E+01	7.9E-01	7.9E-02
Benzo(k)fluoranthene	6.4E+00	0.0012	1.0	5.0E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	1.0E+00	1.0E+01	9.6E-01	9.6E-02
bis(2-Chloroethoxy)methane	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	3.7E+01	2.1E+02	2.8E-02	5.1E-03
bis(2-Chloroethyl)ether	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	3.7E+01	2.1E+02	2.8E-02	5.1E-03
bis(2-Ethylhexyl)phthalate	3.9E+00	0.0012	1.0	3.0E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.0E-01	1.3E+01	1.3E+02	6.3E-02	6.3E-03
Butyl Benzyl Phthalate	1.2E+02	0.0012	1.0	9.4E+00	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	9.9E+00	1.9E+01	5.7E+01	5.1E-01	1.7E-01
Carbazole	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	3.1E+00	3.1E+01	3.3E-01	3.3E-02
Chrysene	2.0E+01	0.0012	1.0	1.6E+00	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	2.1E+00	1.0E+00	1.0E+01	2.0E+00	2.0E-01
Dibenzo(a,h)anthracene	1.8E+00	0.0012	1.0	1.4E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.4E-01	1.0E+00	1.0E+01	6.1E-01	6.1E-02
Dibenzofuran	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	1.6E-02	1.6E-01	6.6E+01	6.6E+00
Diethyl Phthalate	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	5.6E+03	5.6E+04	1.9E-04	1.9E-05
Dimethyl Phthalate	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	4.8E+03	4.8E+04	2.2E-04	2.2E-05
Di-n-butylphthalate	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	4.3E+02	1.4E+03	2.4E-03	7.2E-04
Di-n-octylphthalate	1.3E+00	0.0012	1.0	1.0E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.0E-01	5.7E+02	1.9E+03	1.0E-03	3.1E-04
Fluoranthene	4.2E+00	0.0012	1.0	3.3E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	8.3E-01	1.3E+01	2.6E+01	6.4E-02	3.2E-02
Fluorene	1.2E+00	0.0012	1.0	9.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.9E-01	1.3E+01	2.6E+01	4.6E-02	2.3E-02
Hexachlorobenzene	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	9.7E-02	3.5E-01	1.1E+01	3.0E+00
Hexachlorobutadiene	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	2.4E-01	2.4E-01	4.3E+00	4.3E+00
Hexachlorocyclopentadiene	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	7.2E-01	1.3E+00	1.4E+00	7.9E-01
Hexachloroethane	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	1.2E-01	1.8E+00	8.7E+00	5.8E-01
Indeno(1,2,3-cd)pyrene	1.3E+00	0.0012	1.0	1.0E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.0E-01	1.0E+00	1.0E+01	5.8E-01	5.8E-02
Isophorone	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	2.2E+01	2.2E+02	4.7E-02	4.8E-03
Naphthalene	2.1E+00	0.0012	1.0	1.6E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.6E-01	8.6E+00	1.7E+01	7.7E-02	3.9E-02
Nitrobenzene	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	4.8E-02	4.8E-01	2.2E+01	2.2E+00
N-Nitroso-di-n-propylamine	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	1.0E-02	1.0E-01	1.0E+02	1.0E+01
N-Nitrosodiphenylamine	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	2.4E+02	6.0E+01	4.3E-03	1.7E-02
Pentachlorophenol	4.4E+02	0.0012	1.0	3.4E+01	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	3.4E+01	4.3E-01	4.3E+00	8.0E+01	8.0E+00
Phenanthrene	9.2E+00	0.0012	1.0	7.2E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.2E+00	1.8E+01	3.6E+01	6.7E-02	3.3E-02
Phenol	***7.0E+00***	0.0012	1.0	5.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	1.0E+00	7.2E+01	1.4E+02	1.4E-02	7.2E-03
Pyrene	2.8E+01	0.0012	1.0	2.2E+00	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	2.7E+00	7.8E+00	1.3E+01	3.4E-01	2.1E-01

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-50
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site S (Maximum Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																NOAEL	LOAEL	NOAEL HQ	LOAEL HQ
Pesticides																			
4,4'-DDD	1.7E+00	0.0012	1.0	1.3E-01	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.4E-01	3.4E-01	1.7E+00	4.1E-01	8.2E-02
4,4'-DDE	3.3E+00	0.0012	1.0	2.6E-01	0.0090	4.4E-03	1.0	0.67	1.8E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	2.6E-01	3.4E-01	1.7E+00	7.6E-01	1.5E-01
4,4'-DDT	1.6E+01	0.0012	1.0	1.2E+00	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.3E+00	3.4E-01	1.7E+00	3.7E+00	7.3E-01
Aldrin	***9.0E-01***	0.0012	1.0	7.0E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.9E-03	0.33	3.7E-04	0.015	1.0	7.5E-02	3.1E-01	1.6E+00	2.4E-01	4.8E-02
alpha-BHC	***9.0E-01***	0.0012	1.0	7.0E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	7.5E-02	2.5E+00	5.1E+00	3.0E-02	1.5E-02
alpha-Chlordane	***9.0E-01***	0.0012	1.0	7.0E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	7.5E-02	5.2E+00	1.0E+01	1.4E-02	7.2E-03
beta-BHC	2.6E+01	0.0012	1.0	2.0E+00	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	2.0E+00	6.3E-01	3.2E+00	3.2E+00	6.4E-01
delta-BHC	7.4E-01	0.0012	1.0	5.8E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	6.2E-02	2.5E+00	5.1E+00	2.5E-02	1.2E-02
Dieldrin	***1.8E+00***	0.0012	1.0	1.4E-01	0.0090	4.5E-03	1.0	0.67	1.8E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.4E-01	1.7E-02	1.7E-01	8.5E+00	8.5E-01
Endosulfan I	***9.0E-01***	0.0012	1.0	7.0E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	7.5E-02	5.9E-01	5.9E+00	1.3E-01	1.3E-02
Endosulfan II	5.4E+00	0.0012	1.0	4.2E-01	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	4.3E-01	5.9E-01	5.9E+00	7.2E-01	7.2E-02
Endosulfan Sulfate	***1.8E+00***	0.0012	1.0	1.4E-01	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.5E-01	5.9E-01	5.9E+00	2.5E-01	2.5E-02
Endrin	1.0E+01	0.0012	1.0	7.8E-01	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	7.9E-01	9.4E-02	9.4E-01	8.4E+00	8.4E-01
Endrin Aldehyde	***1.8E+00***	0.0012	1.0	1.4E-01	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.5E-01	9.4E-02	9.4E-01	1.6E+00	1.6E-01
Endrin Ketone	***1.8E+00***	0.0012	1.0	1.4E-01	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	4.2E-03	0.33	8.3E-04	0.015	1.0	1.5E-01	9.4E-02	9.4E-01	1.6E+00	1.6E-01
gamma-BHC (Lindane)	7.5E+00	0.0012	1.0	5.9E-01	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	5.9E-01	2.7E+01	2.7E+02	2.2E-02	2.2E-03
gamma-Chlordane	2.7E+00	0.0012	1.0	2.1E-01	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.6E-03	0.33	3.2E-04	0.015	1.0	2.1E-01	5.2E+00	1.0E+01	4.2E-02	2.1E-02
Heptachlor	1.5E+00	0.0012	1.0	1.2E-01	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	1.7E-03	0.33	3.4E-04	0.015	1.0	1.2E-01	7.0E-02	7.0E-01	1.7E+00	1.7E-01
Heptachlor Epoxide	***9.0E-01***	0.0012	1.0	7.0E-02	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	7.5E-02	9.5E-04	7.0E-03	7.8E+01	1.1E+01
Methoxychlor	***9.0E+00***	0.0012	1.0	7.0E-01	0.0090	***1.0E-01***	1.0	0.67	4.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	7.5E-01	2.0E+00	4.0E+00	3.8E-01	1.9E-01
Toxaphene	***9.0E+01***	0.0012	1.0	7.0E+00	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***2.6E-01***	0.33	5.0E-02	0.015	1.0	7.5E+00	7.9E+00	7.9E+01	9.4E-01	9.4E-02
Herbicides																			
2,4-D	3.3E+00	0.0012	1.0	2.6E-01	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	1.1E-01	0.33	2.2E-02	0.015	1.0	2.9E-01	1.9E+00	9.4E+00	1.5E-01	3.1E-02
2,4-DB	***9.0E-02***	0.0012	1.0	7.0E-03	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	2.0E-02	0.33	4.0E-03	0.015	1.0	2.1E-02	3.1E+00	9.6E+00	6.9E-03	2.2E-03
2,4,5-T	***1.8E+01***	0.0012	1.0	1.4E+00	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	1.4E+00	3.6E+00	1.2E+01	3.9E-01	1.2E-01
2,4,5-TP (Silvex)	2.5E-01	0.0012	1.0	2.0E-02	0.0090	***2.5E-02***	1.0	0.67	1.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	3.2E-02	1.1E+00	3.7E+00	2.8E-02	8.5E-03
Dalapon	***2.2E+01***	0.0012	1.0	1.7E+00	0.0090	***6.0E+00***	1.0	0.67	2.4E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	4.7E+00	1.0E+01	3.5E+01	4.6E-01	1.4E-01
Dicamba	***2.2E-01***	0.0012	1.0	1.7E-02	0.0090	***6.0E-02***	1.0	0.67	2.4E-02	***3.0E-02***	0.33	5.9E-03	0.015	1.0	4.7E-02	3.9E+00	1.3E+01	1.2E-02	3.6E-03
Dichlorprop	***1.1E+00***	0.0012	1.0	8.6E-02	0.0090	***3.0E-01***	1.0	0.67	1.2E-01	***1.5E-01***	0.33	3.0E-02	0.015	1.0	2.4E-01	2.1E-01	2.1E+00	1.1E+00	1.1E-01
Dinoseb	1.7E+00	0.0012	1.0	1.3E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.3E-01	1.2E-01	1.2E+00	5.2E+00	5.2E-01
MCPA	***2.2E+01***	0.0012	1.0	1.7E+00	0.0090	8.0E+01	1.0	0.67	3.2E+01	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.4E+01	2.2E-01	1.1E+00	1.5E+02	3.1E+01
MCPP	***2.2E+01***	0.0012	1.0	1.7E+00	0.0090	***6.0E+00***	1.0	0.67	2.4E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	4.7E+00	3.6E-01	1.1E+00	1.3E+01	4.3E+00
PCBs																			
Total PCBs	1.0E+03	0.0012	1.0	7.9E+01	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***2.5E-02***	0.33	5.0E-03	0.015	1.0	7.9E+01	1.2E-01	1.2E+00	6.5E+02	6.5E+01
Dioxins/Furans																			
TEQ	1.2E-05	0.0012	1.0	9.6E-07	0.0090	5.0E-06	1.0	0.67	2.0E-06	1.3E-05	0.33	2.7E-06	0.015	1.0	5.6E-06	1.2E-06	1.2E-05	4.6E+00	4.6E-01
Metals*																			
Aluminum	9.4E+03	0.0012	1.0	7.3E+02	0.0090	7.9E+02	1.0	0.67	3.2E+02	1.5E+01	0.33	3.0E+00	0.015	1.0	1.1E+03	2.0E+00	2.0E+01	5.2E+02	5.2E+01
Antimony	***1.2E+00***	0.0012	1.0	9.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	6.9E-01	1.3E-01	1.3E+00	5.3E+00	5.3E-01
Arsenic	6.6E+00	0.0012	1.0	5.1E-01	0.0090	5.8E+00	1.0	0.67	2.3E+00	***5.0E-01***	0.33	9.9E-02	0.015	1.0	2.9E+00	1.4E-01	1.4E+00	2.1E+01	2.1E+00
Barium	1.2E+02	0.0012	1.0	9.4E+00	0.0090	1.3E+01	1.0	0.67	5.2E+00	1.9E+00	0.33	3.8E-01	0.015	1.0	1.5E+01	1.1E+01	4.4E+01	1.3E+00	3.4E-01
Beryllium	4.8E-01	0.0012	1.0	3.7E-02	0.0090	***2.0E-01***	1.0	0.67	8.0E-02	***2.0E-01***	0.33	4.0E-02	0.015	1.0	1.6E-01	8.0E-01	8.0E+00	2.0E-01	2.0E-02
Cadmium	8.5E-01	0.0012	1.0	6.6E-02	0.0090	1.7E+00	1.0	0.67	6.8E-01	3.6E-01	0.33	7.1E-02	0.015	1.0	8.2E-01	5.8E+00	5.8E+01	1.4E-01	1.4E-02
Chromium	2.3E+01	0.0012	1.0	1.8E+00	0.0090	1.6E+00	1.0	0.67	6.4E-01	2.0E-01	0.33	4.0E-02	0.015	1.0	2.5E+00	4.0E+00	1.6E+01	6.3E-01	1.6E-01
Cobalt	9.4E+00	0.0012	1.0	7.3E-01	0.0090	1.8E+00	1.0	0.67	7.2E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	1.6E+00	6.0E-02	6.0E-01	2.6E+01	2.6E+00
Copper	2.3E+01	0.0012	1.0	1.8E+00	0.0090	5.6E+00	1.0	0.67	2.3E+00	2.0E+01	0.33	4.0E+00	0.015	1.0	8.0E+00	1.5E+01	2.0E+01	5.3E-01	4.0E-01
Lead	6.3E+01	0.0012	1.0	4.9E+00	0.0090	3.8E+00	1.0	0.67	1.5E+00	1.0E+00	0.33	2.0E-01	0.015	1.0	6.6E+00	9.7E+00	9.7E+01	6.9E-01	6.9E-02
Manganese	6.7E+02	0.0012	1.0	5.2E+01	0.0090	4.8E+01	1.0	0.67	1.9E+01	5.5E+00	0.33	1.1E+00	0.015	1.0	7.3E+01	1.1E+02	3.4E+02	6.8E-01	2.1E-01
Mercury	7.4E-02	0.0012	1.0	5.8E-03	0.0090	7.8E-02	1.0	0.67	3.1E-02	1.3E-01	0.33	2.6E-02	0.015	1.0	6.3E-02	9.9E-02	4.9E-01	6.4E-01	1.3E-01
Nickel	2.0E+01	0.0012	1.0	1.6E+00	0.0090	1.4E+00	1.0	0.67	5.6E-01	***2.0E+00***	0.33	4.0E-01	0.015	1.0	2.5E+00	4.8E+01	9.7E+01	5.2E-02	2.6E-02
Selenium	***1.5E+00***	0.0012	1.0	1.2E-01	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	4.2E-01	1.9E-01	3.2E-01	2.2E+00	1.3E+00
Silver	***6.0E-01***	0.0012	1.0	4.7E-02	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.5E-01	1.9E-01	1.9E+00	1.8E+00	1.8E-01
Thallium	***1.5E+00***	0.0012	1.0	1.2E-01	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***5.0E-01***	0.33	9.9E-02	0.015	1.0	4.2E-01	1.4E-02	1.4E-01	3.1E+01	3.1E+00
Vanadium	2.7E+01	0.0012	1.0	2.1E+00	0.0090	2.5E+00	1.0	0.67	1.0E+00	***5.0E-01***	0.33	9.9E-02	0.015	1.0	3.2E+00	1.1E-01	1.1E+00	2.9E+01	2.9E+00
Zinc	1.1E+02	0.0012	1.0	8.6E+00	0.0090	3.2E+01	1.0	0.67	1.3E+01	5.6E+01	0.33	1.1E+01	0.015	1.0	3.3E+01	2.6E+02	5.1E+02	1.3E-01	6.4E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

Table 7-51
COPECs for Site S
Sauget, IL

Soil HQs	Short-tailed Shrew Modeling HQs (Average Conc.)	Short-tailed Shrew Modeling HQs (Maximum Conc.)	Prairie Vole Modeling HQs (Average Conc.)	Prairie Vole Modeling HQs (Maximum Conc.)
1,2,4-Trichlorobenzene	2,4-Dichlorophenol (NOAEL only)	2,4-Dichlorophenol (NOAEL only)	Pentachlorophenol (NOAEL only)	Pentachlorophenol (NOAEL only)
1,2-Dichlorobenzene	Chrysene (NOAEL only)	4-Nitroaniline (NOAEL only)	PCBs	PCBs
1,3-Dichlorobenzene	Pentachlorophenol	Benzo(a)anthracene (NOAEL only)	Cobalt (NOAEL only)	Cobalt (NOAEL only)
2,4-Dichlorophenol	4,4'-DDT (NOAEL only)	Chrysene (NOAEL only)	Mercury (NOAEL only)	Mercury (NOAEL only)
Benzo(a)anthracene	beta-BHC (NOAEL only)	Pentachlorophenol		
Benzo(a)pyrene	Dieldrin (NOAEL only)	beta-BHC (NOAEL only)		
Benzo(b)fluoranthene	Endrin (NOAEL only)	Dieldrin (NOAEL only)		
Benzo(k)fluoranthene	Endrin ketone (NOAEL only)	4,4'-DDT (NOAEL only)		
bis(2-Ethylhexyl)phthalate	Hepatachlor (NOAEL only)	Endrin (NOAEL only)		
Dibenzo(a,h)anthracene	Dinoseb (NOAEL only)	Endrin ketone (NOAEL only)		
Fluoranthene	MCPA	Hepatochlor (NOAEL only)		
Indeno(1,2,3-cd)pyrene	MCPP	Dinoseb (NOAEL only)		
Naphthalene	PCBs	MCPA		
Pentachlorophenol	Aluminum	PCBs		
Phenenthrene	Antimony (NOAEL only)	Cobalt		
Pyrene	Cobalt			
4,4'-DDD	Vanadium			
4,4'-DDE				
4,4'-DDT				
beta-BHC				
Endrin				
gamma-BHC (Lindane)				
PCBs				
Aluminum				
Chromium				
Manganese				
Vanadium				

NOTES:
Analytes listed are only for those exceeding their benchmark/TRV, based on detected values, and were above the background values.
Shaded entries are for those compounds that are COPECs for all receptors and all concentrations.

Table 7-52
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site Q (South) (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	6.2E+01	2.9E-03	8.1E-04
1,2-Dichlorobenzene	2.6E-01	0.00012	1.0	7.4E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.4E+03	5.1E-04	3.6E-05
1,3-Dichlorobenzene	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.4E+03	5.1E-04	3.6E-05
1,4-Dichlorobenzene	2.8E-01	0.00012	1.0	8.0E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.9E+01	1.7E+02	5.1E-04	2.9E-04
2,2'-Oxybis(1-Chloropropane)	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
2,4,5-Trichlorophenol	***2.8E-01***	0.00012	1.0	8.0E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	3.5E+01	4.4E-03	1.5E-03
2,4,6-Trichlorophenol	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.8E+02	3.5E+01	8.7E-05	1.5E-03
2,4-Dichlorophenol	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.5E-01	3.5E+00	1.5E-01	1.5E-02
2,4-Dimethylphenol	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.0E+00	2.5E+01	1.0E-02	2.0E-03
2,4-Dinitrophenol	***1.4E+00***	0.00012	1.0	4.1E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	1.6E-03	1.6E-02	1.7E+02	1.7E+01
2,4-Dinitrotoluene	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.9E-01	2.2E+00	1.8E-01	2.3E-02
2,6-Dinitrotoluene	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	8.1E-01	8.1E+00	6.2E-02	6.2E-03
2-Chloronaphthalene	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.5E+01	6.0E+01	2.0E-03	8.4E-04
2-Chlorophenol	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.8E+01	5.8E+00	8.7E-04	8.7E-03
2-Methylnaphthalene	2.5E-01	0.00012	1.0	7.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.8E+03	2.8E+04	1.8E-05	1.8E-06
2-Methylphenol (o-Cresol)	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
2-Nitroaniline	***1.4E+00***	0.00012	1.0	4.1E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
2-Nitrophenol	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.9E+00	8.1E+00	1.7E-02	6.2E-03
3,3'-Dichlorobenzidine	***5.5E-01***	0.00012	1.0	1.6E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.5E+01	5.1E+02	6.8E-03	2.0E-04
3/4-Methylphenol (m&p-Cresol)	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
3-Nitroaniline	***1.4E+00***	0.00012	1.0	4.1E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4,6-Dinitro-2-methylphenol	***1.4E+00***	0.00012	1.0	4.1E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E-01	5.3E+00	9.0E-01	4.9E-02
4-Bromophenyl Phenyl Ether	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+00	9.2E+00	4.4E-02	5.4E-03
4-Chloro-3-methylphenol	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.3E+02	1.3E+03	3.9E-04	3.9E-05
4-Chloroaniline	5.5E-01	0.00012	1.0	1.6E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.4E+00	1.4E+01	7.0E-02	7.0E-03
4-Chlorophenyl Phenyl Ether	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+00	9.2E+00	4.4E-02	5.4E-03
4-Nitroaniline	***1.4E+00***	0.00012	1.0	4.1E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.3E-02	5.3E-03
4-Nitrophenol	***1.4E+00***	0.00012	1.0	4.1E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E+00	8.1E+00	9.0E-02	3.2E-02
Acenaphthene	1.8E-01	0.00012	1.0	5.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Acenaphthylene	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Anthracene	2.9E-01	0.00012	1.0	8.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+02	1.0E+03	5.0E-04	5.0E-05
Benzo(a)anthracene	5.9E-01	0.00012	1.0	1.7E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.0E+00	1.0E+01	5.1E-02	5.1E-03
Benzo(a)pyrene	5.9E-01	0.00012	1.0	1.7E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.0E+00	1.0E+01	5.1E-02	5.1E-03
Benzo(b)fluoranthene	6.4E-01	0.00012	1.0	1.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.0E+00	1.0E+01	5.1E-02	5.1E-03
Benzo(g,h,i)perylene	3.6E-01	0.00012	1.0	1.0E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.0E+00	1.0E+01	5.1E-02	5.1E-03
Benzo(k)fluoranthene	4.7E-01	0.00012	1.0	1.4E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.0E+00	1.0E+01	5.1E-02	5.1E-03
bis(2-Chloroethoxy)methane	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
bis(2-Chloroethyl)ether	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.6E+01	2.0E+02	1.4E-03	2.5E-04
bis(2-Ethylhexyl)phthalate	1.2E+00	0.00012	1.0	3.4E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	1.9E+01	1.9E+02	2.8E-03	2.8E-04
Butyl Benzyl Phthalate	3.1E-01	0.00012	1.0	8.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.8E+01	5.4E+01	2.7E-03	9.3E-04
Carbazole	2.2E-01	0.00012	1.0	6.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.0E+00	3.0E+01	1.7E-02	1.7E-03
Chrysene	6.3E-01	0.00012	1.0	1.8E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.0E+00	1.0E+01	5.1E-02	5.1E-03
Dibenzo(a,h)anthracene	2.7E-01	0.00012	1.0	7.7E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Dibenzofuran	2.5E-01	0.00012	1.0	7.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.5E-02	1.5E-01	3.3E+00	3.3E-01
Diethyl Phthalate	2.7E-01	0.00012	1.0	7.7E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.5E+03	4.5E+04	1.1E-05	1.1E-06
Dimethyl Phthalate	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.6E+03	4.6E+04	1.1E-05	1.1E-06
Di-n-butylphthalate	2.4E-01	0.00012	1.0	6.9E-04	0.0042	3.3E-01	1.0	3.3E-02	0.0416	1.0	3.3E-02	5.6E+02	1.9E+03	5.9E-05	1.8E-05
Di-n-octylphthalate	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	5.5E+02	1.8E+03	9.2E-05	2.8E-05
Fluoranthene	1.1E+00	0.00012	1.0	3.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	1.2E+01	2.5E+01	4.2E-03	2.1E-03
Fluorene	2.5E-01	0.00012	1.0	7.3E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E+01	2.5E+01	4.0E-03	2.0E-03
Hexachlorobenzene	2.7E-01	0.00012	1.0	7.7E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	9.2E-02	3.4E-01	5.4E-01	1.5E-01
Hexachlorobutadiene	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.3E-01	2.3E-01	2.2E-01	2.2E-01
Hexachlorocyclopentadiene	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	6.9E-01	1.3E+00	7.3E-02	4.0E-02
Hexachloroethane	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E-01	1.7E+00	4.4E-01	2.9E-02
Indeno(1,2,3-cd)pyrene	2.9E-01	0.00012	1.0	8.2E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E+00	1.0E+01	5.0E-02	5.0E-03
Isophorone	3.0E-01	0.00012	1.0	8.5E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.2E+01	2.1E+02	2.3E-03	2.4E-04
Naphthalene	2.7E-01	0.00012	1.0	7.8E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	8.2E+00	1.6E+01	6.1E-03	3.1E-03
Nitrobenzene	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	4.6E-02	4.6E-01	1.1E+00	1.1E-01
N-Nitroso-di-n-propylamine	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.0E-02	1.0E-01	5.0E+00	5.0E-01
N-Nitrosodiphenylamine	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	2.3E+02	5.8E+01	2.2E-04	8.7E-04
Pentachlorophenol	2.4E-01	0.00012	1.0	6.9E-04	0.0042	***2.9E-02***	1.0	2.9E-03	0.0416	1.0	3.6E-03	3.7E-01	3.7E+00	9.7E-03	9.7E-04
Phenanthrene	7.7E-01	0.00012	1.0	2.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.7E+01	3.5E+01	3.0E-03	1.5E-03
Phenol	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	4.8E-01	1.0	4.8E-02	0.0416	1.0	4.9E-02	6.9E+01	1.4E+02	7.1E-04	3.5E-04
Pyrene	1.1E+00	0.00012	1.0	3.3E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	7.5E+00	1.2E+01	7.1E-03	4.2E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workpla
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-52
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site Q (South) (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	1.3E-02	0.00012	1.0	3.9E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.3E-04	4.2E-01	2.1E+00	1.3E-03	2.5E-04
4,4'-DDE	6.2E-02	0.00012	1.0	1.8E-04	0.0042	4.7E-03	1.0	4.7E-04	0.0416	1.0	6.5E-04	4.2E-01	2.1E+00	1.5E-03	3.1E-04
4,4'-DDT	3.8E-01	0.00012	1.0	1.1E-03	0.0042	4.7E-03	1.0	4.7E-04	0.0416	1.0	1.5E-03	4.2E-01	2.1E+00	3.7E-03	7.4E-04
Aldrin	6.6E-03	0.00012	1.0	1.9E-05	0.0042	2.4E-03	1.0	2.4E-04	0.0416	1.0	2.6E-04	2.8E-01	1.4E+00	9.3E-04	1.9E-04
alpha-BHC	2.0E-02	0.00012	1.0	5.8E-05	0.0042	2.2E-03	1.0	2.2E-04	0.0416	1.0	2.7E-04	2.3E+00	4.5E+00	1.2E-04	6.0E-05
alpha-Chlordane	9.7E-03	0.00012	1.0	2.8E-05	0.0042	2.5E-03	1.0	2.5E-04	0.0416	1.0	2.8E-04	4.6E+00	9.1E+00	6.1E-05	3.0E-05
beta-BHC	6.6E-03	0.00012	1.0	1.9E-05	0.0042	3.3E-03	1.0	3.3E-04	0.0416	1.0	3.5E-04	5.7E-01	2.8E+00	6.2E-04	1.2E-04
delta-BHC	***6.6E-03***	0.00012	1.0	1.9E-05	0.0042	2.3E-03	1.0	2.3E-04	0.0416	1.0	2.5E-04	2.3E+00	4.5E+00	1.1E-04	5.5E-05
Dieldrin	6.2E-02	0.00012	1.0	1.8E-04	0.0042	4.4E-03	1.0	4.4E-04	0.0416	1.0	6.2E-04	1.8E-02	1.8E-01	3.6E-02	3.6E-03
Endosulfan I	***6.6E-03***	0.00012	1.0	1.9E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.7E-04	4.3E-01	4.3E+00	6.4E-04	6.4E-05
Endosulfan II	1.3E-02	0.00012	1.0	3.6E-05	0.0042	4.7E-03	1.0	4.7E-04	0.0416	1.0	5.0E-04	4.3E-01	4.3E+00	1.2E-03	1.2E-04
Endosulfan Sulfate	1.0E-02	0.00012	1.0	3.0E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.2E-04	4.3E-01	4.3E+00	1.2E-03	1.2E-04
Endrin	1.9E-02	0.00012	1.0	5.5E-05	0.0042	4.7E-03	1.0	4.7E-04	0.0416	1.0	5.2E-04	9.2E-02	9.2E-01	5.7E-03	5.7E-04
Endrin Aldehyde	1.2E-02	0.00012	1.0	3.6E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.3E-04	9.2E-02	9.2E-01	5.8E-03	5.8E-04
Endrin Ketone	1.8E-02	0.00012	1.0	5.1E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.5E-04	9.2E-02	9.2E-01	5.9E-03	5.9E-04
gamma-BHC (Lindane)	6.4E-03	0.00012	1.0	1.9E-05	0.0042	1.9E-03	1.0	1.9E-04	0.0416	1.0	2.1E-04	2.0E+01	2.0E+02	1.0E-05	1.0E-06
gamma-Chlordane	4.5E-02	0.00012	1.0	1.3E-04	0.0042	2.4E-03	1.0	2.4E-04	0.0416	1.0	3.7E-04	4.6E+00	9.1E+00	8.1E-05	4.0E-05
Heptachlor	***6.6E-03***	0.00012	1.0	1.9E-05	0.0042	2.3E-03	1.0	2.3E-04	0.0416	1.0	2.5E-04	7.4E-02	7.4E-01	3.3E-03	3.3E-04
Heptachlor Epoxide	1.2E-02	0.00012	1.0	3.4E-05	0.0042	2.5E-03	1.0	2.5E-04	0.0416	1.0	2.8E-04	1.0E-03	7.5E-03	2.8E-01	3.8E-02
Methoxychlor	7.9E-02	0.00012	1.0	2.3E-04	0.0042	2.4E-02	1.0	2.4E-03	0.0416	1.0	2.6E-03	2.3E+00	4.7E+00	1.1E-03	5.6E-04
Toxaphene	***6.6E-01***	0.00012	1.0	1.9E-03	0.0042	***2.6E-01***	1.0	2.6E-02	0.0416	1.0	2.7E-02	7.9E+00	7.9E+01	3.4E-03	3.4E-04
Herbicides															
2,4-D	1.2E-02	0.00012	1.0	3.4E-05	0.0042	5.4E-02	1.0	5.4E-03	0.0416	1.0	5.4E-03	1.6E+00	8.1E+00	3.4E-03	6.7E-04
2,4-DB	1.0E-02	0.00012	1.0	3.0E-05	0.0042	1.0E-01	1.0	1.0E-02	0.0416	1.0	1.0E-02	2.6E+00	8.3E+00	4.0E-03	1.3E-03
2,4,5-T	9.7E-03	0.00012	1.0	2.8E-05	0.0042	5.4E-02	1.0	5.4E-03	0.0416	1.0	5.5E-03	3.5E+00	1.2E+01	1.6E-03	4.7E-04
2,4,5-TP (Silvex)	9.5E-03	0.00012	1.0	2.7E-05	0.0042	1.6E-02	1.0	1.6E-03	0.0416	1.0	1.7E-03	1.1E+00	3.6E+00	1.6E-03	4.7E-04
Dalapon	***1.8E+00***	0.00012	1.0	5.3E-03	0.0042	***3.5E+00***	1.0	3.5E-01	0.0416	1.0	3.5E-01	9.8E+00	3.3E+01	3.6E-02	1.1E-02
Dicamba	2.0E-02	0.00012	1.0	5.6E-05	0.0042	***3.5E-02***	1.0	3.5E-03	0.0416	1.0	3.5E-03	3.7E+00	1.2E+01	9.4E-04	2.8E-04
Dichlorprop	9.9E-02	0.00012	1.0	2.9E-04	0.0042	***1.7E-01***	1.0	1.7E-02	0.0416	1.0	1.8E-02	2.0E-01	2.0E+00	8.8E-02	8.8E-03
Dinoseb	***2.7E-01***	0.00012	1.0	7.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.2E-01	1.2E+00	4.4E-01	4.4E-02
MCPA	2.4E+00	0.00012	1.0	6.9E-03	0.0042	5.7E+00	1.0	5.7E-01	0.0416	1.0	5.8E-01	2.2E-01	1.1E+00	2.7E+00	5.4E-01
MCPP	3.6E+00	0.00012	1.0	1.0E-02	0.0042	4.8E+00	1.0	4.8E-01	0.0416	1.0	4.9E-01	3.5E-01	1.0E+00	1.4E+00	4.7E-01
PCBs															
Total PCBs	2.4E+00	0.00012	1.0	7.0E-03	0.0042	***2.5E-02***	1.0	2.5E-03	0.0416	1.0	9.5E-03	1.2E-01	1.2E+00	8.2E-02	8.2E-03
Dioxins/Furans															
TEQ	9.2E-04	0.00012	1.0	2.7E-06	0.0042	3.2E-07	1.0	3.2E-08	0.0416	1.0	2.7E-06	1.2E-06	1.2E-05	2.3E+00	2.3E-01
Metals*															
Aluminum	9.3E+03	0.00012	1.0	2.7E+01	0.0042	2.7E+01	1.0	2.7E+00	0.0416	1.0	2.9E+01	1.9E+00	1.9E+01	1.5E+01	1.5E+00
Antimony	4.9E+00	0.00012	1.0	1.4E-02	0.0042	***9.6E-01***	1.0	9.6E-02	0.0416	1.0	1.1E-01	1.2E-01	1.2E+00	8.8E-01	8.8E-02
Arsenic	9.1E+00	0.00012	1.0	2.6E-02	0.0042	***4.8E-01***	1.0	4.8E-02	0.0416	1.0	7.4E-02	1.3E-01	1.3E+00	5.9E-01	5.9E-02
Barium	4.8E+02	0.00012	1.0	1.4E+00	0.0042	1.1E+01	1.0	1.1E+00	0.0416	1.0	2.5E+00	9.4E+00	3.7E+01	2.7E-01	6.9E-02
Beryllium	6.5E-01	0.00012	1.0	1.9E-03	0.0042	***1.9E-01***	1.0	1.9E-02	0.0416	1.0	2.1E-02	7.6E-01	7.6E+00	2.8E-02	2.8E-03
Cadmium	3.1E+02	0.00012	1.0	9.1E-01	0.0042	1.6E-01	1.0	1.6E-02	0.0416	1.0	9.2E-01	3.9E+00	3.9E+01	2.4E-01	2.4E-02
Chromium	6.4E+01	0.00012	1.0	1.9E-01	0.0042	4.2E-01	1.0	4.2E-02	0.0416	1.0	2.3E-01	3.8E+00	1.5E+01	6.0E-02	1.5E-02
Cobalt	9.4E+00	0.00012	1.0	2.7E-02	0.0042	***4.8E-01***	1.0	4.8E-02	0.0416	1.0	7.5E-02	5.8E-02	5.8E-01	1.3E+00	1.3E-01
Copper	3.1E+02	0.00012	1.0	8.9E-01	0.0042	3.8E+00	1.0	3.8E-01	0.0416	1.0	1.3E+00	1.4E+01	1.9E+01	8.8E-02	6.7E-02
Lead	5.0E+02	0.00012	1.0	1.4E+00	0.0042	7.2E-01	1.0	7.2E-02	0.0416	1.0	1.5E+00	9.2E+00	9.2E+01	1.6E-01	1.6E-02
Manganese	5.5E+02	0.00012	1.0	1.6E+00	0.0042	1.3E+01	1.0	1.3E+00	0.0416	1.0	2.9E+00	1.0E+02	3.3E+02	2.8E-02	8.7E-03
Mercury	6.3E+00	0.00012	1.0	1.8E-02	0.0042	4.4E-01	1.0	4.4E-02	0.0416	1.0	6.2E-02	7.6E-02	3.8E-01	8.2E-01	1.6E-01
Nickel	5.0E+01	0.00012	1.0	1.4E-01	0.0042	***1.9E+00***	1.0	1.9E-01	0.0416	1.0	3.3E-01	4.6E+01	9.2E+01	7.2E-03	3.6E-03
Selenium	1.2E+00	0.00012	1.0	3.4E-03	0.0042	5.2E-01	1.0	5.2E-02	0.0416	1.0	5.6E-02	1.9E-01	3.2E-01	2.9E-01	1.7E-01
Silver	2.4E+00	0.00012	1.0	6.9E-03	0.0042	***4.8E-01***	1.0	4.8E-02	0.0416	1.0	5.5E-02	1.8E-01	1.8E+00	3.0E-01	3.0E-02
Thallium	1.3E+00	0.00012	1.0	3.6E-03	0.0042	***4.8E-01***	1.0	4.8E-02	0.0416	1.0	5.2E-02	1.2E-02	1.2E-01	4.4E+00	4.4E-01
Vanadium	2.5E+01	0.00012	1.0	7.2E-02	0.0042	***4.8E-01***	1.0	4.8E-02	0.0416	1.0	1.2E-01	1.3E-01	1.3E+00	9.3E-01	9.3E-02
Zinc	1.3E+03	0.00012	1.0	3.7E+00	0.0042	2.4E+01	1.0	2.4E+00	0.0416	1.0	6.1E+00	2.3E+02	4.6E+02	2.7E-02	1.3E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-53
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site Q (South) (95% UCL Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.7E+01	6.2E+01	3.0E-03	8.2E-04
1,2-Dichlorobenzene	3.9E-01	0.00012	1.0	1.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	9.9E+01	1.4E+03	5.1E-04	3.7E-05
1,3-Dichlorobenzene	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	9.9E+01	1.4E+03	5.1E-04	3.7E-05
1,4-Dichlorobenzene	4.1E-01	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	9.9E+01	1.7E+02	5.1E-04	2.9E-04
2,2'-Oxybis(1-Chloropropane)	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	3.6E+01	2.0E+02	1.4E-03	2.6E-04
2,4,5-Trichlorophenol	***4.2E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.2E+01	3.5E+01	4.4E-03	1.5E-03
2,4,6-Trichlorophenol	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	5.8E+02	3.5E+01	8.8E-05	1.5E-03
2,4-Dichlorophenol	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	3.5E-01	3.5E+00	1.5E-01	1.5E-02
2,4-Dimethylphenol	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	5.0E+00	2.5E+01	1.0E-02	2.0E-03
2,4-Dinitrophenol	***2.1E+00***	0.00012	1.0	6.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	1.6E-03	1.6E-02	1.7E+02	1.7E+01
2,4-Dinitrotoluene	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	2.9E-01	2.2E+00	1.8E-01	2.4E-02
2,6-Dinitrotoluene	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	8.1E-01	8.1E+00	6.3E-02	6.3E-03
2-Chloronaphthalene	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	2.5E+01	6.0E+01	2.0E-03	8.5E-04
2-Chlorophenol	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	5.8E+01	5.8E+00	8.8E-04	8.8E-03
2-Methylnaphthalene	3.9E-01	0.00012	1.0	1.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	2.8E+03	2.8E+04	1.8E-05	1.8E-06
2-Methylphenol (o-Cresol)	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
2-Nitroaniline	***2.1E+00***	0.00012	1.0	6.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.4E-02	5.4E-03
2-Nitrophenol	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	2.9E+00	8.1E+00	1.8E-02	6.3E-03
3,3'-Dichlorobenzidine	***8.1E-01***	0.00012	1.0	2.3E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.5E+01	5.1E+02	6.9E-03	2.0E-04
3/4-Methylphenol (m&p-Cresol)	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	2.7E+02	2.7E+03	1.9E-04	1.9E-05
3-Nitroaniline	***2.1E+00***	0.00012	1.0	6.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.4E-02	5.4E-03
4,6-Dinitro-2-methylphenol	***2.1E+00***	0.00012	1.0	6.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E-01	5.3E+00	9.0E-01	5.0E-02
4-Bromophenyl Phenyl Ether	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.2E+00	9.2E+00	4.4E-02	5.5E-03
4-Chloro-3-methylphenol	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.3E+02	1.3E+03	3.9E-04	3.9E-05
4-Chloroaniline	8.1E-01	0.00012	1.0	2.3E-03	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.0E-01	1.4E+00	1.4E+01	7.1E-02	7.1E-03
4-Chlorophenyl Phenyl Ether	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.2E+00	9.2E+00	4.4E-02	5.5E-03
4-Nitroaniline	***2.1E+00***	0.00012	1.0	6.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	4.9E+00	4.9E+01	5.4E-02	5.4E-03
4-Nitrophenol	***2.1E+00***	0.00012	1.0	6.0E-03	0.0042	***2.6E+00***	1.0	2.6E-01	0.0416	1.0	2.6E-01	2.9E+00	8.1E+00	9.0E-02	3.2E-02
Acenaphthene	2.1E-01	0.00012	1.0	5.9E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	1.7E+01	3.5E+01	2.9E-03	1.4E-03
Acenaphthylene	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.7E+01	3.5E+01	2.9E-03	1.5E-03
Anthracene	4.1E-01	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.0E+02	1.0E+03	5.1E-04	5.1E-05
Benzo(a)anthracene	9.9E-01	0.00012	1.0	2.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.2E-02	5.2E-03
Benzo(a)pyrene	1.0E+00	0.00012	1.0	3.0E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.3E-02	5.3E-03
Benzo(b)fluoranthene	1.1E+00	0.00012	1.0	3.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	1.0E+00	1.0E+01	5.3E-02	5.3E-03
Benzo(g,h,i)perylene	6.5E-01	0.00012	1.0	1.9E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.0E+00	1.0E+01	5.2E-02	5.2E-03
Benzo(k)fluoranthene	8.2E-01	0.00012	1.0	2.4E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.2E-02	1.0E+00	1.0E+01	5.2E-02	5.2E-03
bis(2-Chloroethoxy)methane	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	3.6E+01	2.0E+02	1.4E-03	2.6E-04
bis(2-Chloroethyl)ether	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	3.6E+01	2.0E+02	1.4E-03	2.6E-04
bis(2-Ethylhexyl)phthalate	2.2E+00	0.00012	1.0	6.4E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.6E-02	1.9E+01	1.9E+02	3.0E-03	3.0E-04
Butyl Benzyl Phthalate	4.5E-01	0.00012	1.0	1.3E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.8E+01	5.4E+01	2.8E-03	9.3E-04
Carbazole	2.6E-01	0.00012	1.0	7.6E-04	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.0E-02	3.0E+00	3.0E+01	1.7E-02	1.7E-03
Chrysene	1.1E+00	0.00012	1.0	3.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	1.0E+00	1.0E+01	5.3E-02	5.3E-03
Dibenzo(a,h)anthracene	4.0E-01	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.0E+00	1.0E+01	5.1E-02	5.1E-03
Dibenzofuran	3.8E-01	0.00012	1.0	1.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.5E-02	1.5E-01	3.3E+00	3.3E-01
Diethyl Phthalate	4.0E-01	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	4.5E+03	4.5E+04	1.1E-05	1.1E-06
Dimethyl Phthalate	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	4.6E+03	4.6E+04	1.1E-05	1.1E-06
Di-n-butylphthalate	3.8E-01	0.00012	1.0	1.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	5.6E+02	1.9E+03	9.1E-05	2.7E-05
Di-n-octylphthalate	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	5.5E+02	1.8E+03	9.2E-05	2.8E-05
Fluoranthene	1.9E+00	0.00012	1.0	5.4E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.5E-02	1.2E+01	2.5E+01	4.4E-03	2.2E-03
Fluorene	3.9E-01	0.00012	1.0	1.1E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.2E+01	2.5E+01	4.1E-03	2.0E-03
Hexachlorobenzene	4.0E-01	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	9.2E-02	3.4E-01	5.5E-01	1.5E-01
Hexachlorobutadiene	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	2.3E-01	2.3E-01	2.2E-01	2.2E-01
Hexachlorocyclopentadiene	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	6.9E-01	1.3E+00	7.3E-02	4.0E-02
Hexachloroethane	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.2E-01	1.7E+00	4.4E-01	2.9E-02
Indeno(1,2,3-cd)pyrene	4.4E-01	0.00012	1.0	1.3E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.0E+00	1.0E+01	5.1E-02	5.1E-03
Isophorone	4.3E-01	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	2.2E+01	2.1E+02	2.4E-03	2.5E-04
Naphthalene	4.0E-01	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	8.2E+00	1.6E+01	6.2E-03	3.1E-03
Nitrobenzene	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	4.6E-02	4.6E-01	1.1E+00	1.1E-01
N-Nitroso-di-n-propylamine	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.0E-02	1.0E-01	5.1E+00	5.1E-01
N-Nitrosodiphenylamine	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	2.3E+02	5.8E+01	2.2E-04	8.8E-04
Pentachlorophenol	5.5E-01	0.00012	1.0	1.6E-03	0.0042	***5.0E-02***	1.0	5.0E-03	0.0416	1.0	6.6E-03	3.7E-01	3.7E+00	1.8E-02	1.8E-03
Phenanthrene	1.3E+00	0.00012	1.0	3.8E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.3E-02	1.7E+01	3.5E+01	3.1E-03	1.5E-03
Phenol	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	6.9E+01	1.4E+02	7.3E-04	3.7E-04
Pyrene	1.9E+00	0.00012	1.0	5.5E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.5E-02	7.5E+00	1.2E+01	7.4E-03	4.4E-03

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workpla
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-53
Hazard Quotients for Ingestion of Plants
Prairie Vole
Site Q (South) (95% UCL Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant In Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Plants (mg/kg)	Area Use Factor (a)	Dose from Plants (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	1.9E-02	0.00012	1.0	5.5E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.5E-04	4.2E-01	2.1E+00	1.3E-03	2.6E-04
4,4'-DDE	1.3E-01	0.00012	1.0	3.7E-04	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	8.6E-04	4.2E-01	2.1E+00	2.1E-03	4.1E-04
4,4'-DDT	6.3E-01	0.00012	1.0	1.8E-03	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	2.3E-03	4.2E-01	2.1E+00	5.5E-03	1.1E-03
Aldrin	9.6E-03	0.00012	1.0	2.8E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.8E-04	2.8E-01	1.4E+00	1.0E-03	2.0E-04
alpha-BHC	4.0E-02	0.00012	1.0	1.2E-04	0.0042	3.7E-03	1.0	3.7E-04	0.0416	1.0	4.9E-04	2.3E+00	4.5E+00	2.1E-04	1.1E-04
alpha-Chlordane	1.6E-02	0.00012	1.0	4.7E-05	0.0042	2.7E-03	1.0	2.7E-04	0.0416	1.0	3.2E-04	4.6E+00	9.1E+00	6.9E-05	3.5E-05
beta-BHC	9.6E-03	0.00012	1.0	2.8E-05	0.0042	5.9E-03	1.0	5.9E-04	0.0416	1.0	6.2E-04	5.7E-01	2.8E+00	1.1E-03	2.2E-04
delta-BHC	***9.6E-03***	0.00012	1.0	2.8E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.8E-04	2.3E+00	4.5E+00	1.2E-04	6.2E-05
Dieldrin	1.1E-01	0.00012	1.0	3.1E-04	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	8.1E-04	1.8E-02	1.8E-01	4.6E-02	4.6E-03
Endosulfan I	***9.6E-03***	0.00012	1.0	2.8E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.8E-04	4.3E-01	4.3E+00	6.6E-04	6.6E-05
Endosulfan II	1.8E-02	0.00012	1.0	5.3E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.5E-04	4.3E-01	4.3E+00	1.3E-03	1.3E-04
Endosulfan Sulfate	1.5E-02	0.00012	1.0	4.2E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.4E-04	4.3E-01	4.3E+00	1.2E-03	1.2E-04
Endrin	3.3E-02	0.00012	1.0	9.5E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.9E-04	9.2E-02	9.2E-01	6.4E-03	6.4E-04
Endrin Aldehyde	1.8E-02	0.00012	1.0	5.2E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.5E-04	9.2E-02	9.2E-01	6.0E-03	6.0E-04
Endrin Ketone	3.0E-02	0.00012	1.0	8.6E-05	0.0042	***5.0E-03***	1.0	5.0E-04	0.0416	1.0	5.8E-04	9.2E-02	9.2E-01	6.3E-03	6.3E-04
gamma-BHC (Lindane)	9.4E-03	0.00012	1.0	2.7E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.8E-04	2.0E+01	2.0E+02	1.4E-05	1.4E-06
gamma-Chlordane	9.0E-02	0.00012	1.0	2.6E-04	0.0042	2.9E-03	1.0	2.9E-04	0.0416	1.0	5.5E-04	4.6E+00	9.1E+00	1.2E-04	6.0E-05
Heptachlor	***9.6E-03***	0.00012	1.0	2.8E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	2.8E-04	7.4E-02	7.4E-01	3.8E-03	3.8E-04
Heptachlor Epoxide	1.9E-02	0.00012	1.0	5.5E-05	0.0042	***2.6E-03***	1.0	2.6E-04	0.0416	1.0	3.1E-04	1.0E-03	7.5E-03	3.1E-01	4.2E-02
Methoxychlor	1.1E-01	0.00012	1.0	3.1E-04	0.0042	***2.6E-02***	1.0	2.6E-03	0.0416	1.0	2.9E-03	2.3E+00	4.7E+00	1.2E-03	6.1E-04
Toxaphene	***9.6E-01***	0.00012	1.0	2.8E-03	0.0042	***2.6E-01***	1.0	2.6E-02	0.0416	1.0	2.8E-02	7.9E+00	7.9E+01	3.6E-03	3.6E-04
Herbicides															
2,4-D	2.0E-02	0.00012	1.0	5.9E-05	0.0042	1.6E-01	1.0	1.6E-02	0.0416	1.0	1.6E-02	1.6E+00	8.1E+00	9.9E-03	2.0E-03
2,4-DB	1.9E-02	0.00012	1.0	5.5E-05	0.0042	5.6E-01	1.0	5.6E-02	0.0416	1.0	5.6E-02	2.6E+00	8.3E+00	2.1E-02	6.8E-03
2,4,5-T	1.8E-02	0.00012	1.0	5.3E-05	0.0042	4.4E-01	1.0	4.4E-02	0.0416	1.0	4.4E-02	3.5E+00	1.2E+01	1.3E-02	3.8E-03
2,4,5-TP (Silvex)	1.8E-02	0.00012	1.0	5.2E-05	0.0042	4.0E-02	1.0	4.0E-03	0.0416	1.0	4.1E-03	1.1E+00	3.6E+00	3.8E-03	1.1E-03
Dalapon	***3.9E+00***	0.00012	1.0	1.1E-02	0.0042	***6.0E+00***	1.0	6.0E-01	0.0416	1.0	6.1E-01	9.8E+00	3.3E+01	6.3E-02	1.8E-02
Dicamba	4.0E-02	0.00012	1.0	1.2E-04	0.0042	***6.0E-02***	1.0	6.0E-03	0.0416	1.0	6.1E-03	3.7E+00	1.2E+01	1.6E-03	4.9E-04
Dichlorprop	2.0E-01	0.00012	1.0	5.8E-04	0.0042	***3.0E-01***	1.0	3.0E-02	0.0416	1.0	3.1E-02	2.0E-01	2.0E+00	1.5E-01	1.5E-02
Dinoseb	***4.1E-01***	0.00012	1.0	1.2E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.1E-02	1.2E-01	1.2E+00	4.4E-01	4.4E-02
MCPA	4.4E+00	0.00012	1.0	1.3E-02	0.0042	1.4E+01	1.0	1.4E+00	0.0416	1.0	1.4E+00	2.2E-01	1.1E+00	6.6E+00	1.3E+00
MCPP	5.8E+00	0.00012	1.0	1.7E-02	0.0042	1.1E+01	1.0	1.1E+00	0.0416	1.0	1.1E+00	3.5E-01	1.0E+00	3.2E+00	1.1E+00
PCBs															
Total PCBs	4.1E+00	0.00012	1.0	1.2E-02	0.0042	***2.5E-02***	1.0	2.5E-03	0.0416	1.0	1.4E-02	1.2E-01	1.2E+00	1.2E-01	1.2E-02
Dioxins/Furans															
TEQ	1.7E-03	0.00012	1.0	4.9E-06	0.0042	5.9E-07	1.0	5.9E-08	0.0416	1.0	5.0E-06	1.2E-06	1.2E-05	4.3E+00	4.3E-01
Metals*															
Aluminum	1.0E+04	0.00012	1.0	3.0E+01	0.0042	7.5E+01	1.0	7.5E+00	0.0416	1.0	3.7E+01	1.9E+00	1.9E+01	1.9E+01	1.9E+00
Antimony	8.9E+00	0.00012	1.0	2.6E-02	0.0042	***1.0E+00***	1.0	1.0E-01	0.0416	1.0	1.3E-01	1.2E-01	1.2E+00	1.0E+00	1.0E-01
Arsenic	1.2E+01	0.00012	1.0	3.4E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	8.4E-02	1.3E-01	1.3E+00	6.7E-01	6.7E-02
Barium	6.4E+02	0.00012	1.0	1.9E+00	0.0042	3.2E+01	1.0	3.2E+00	0.0416	1.0	5.1E+00	9.4E+00	3.7E+01	5.4E-01	1.4E-01
Beryllium	7.2E-01	0.00012	1.0	2.1E-03	0.0042	***2.0E-01***	1.0	2.0E-02	0.0416	1.0	2.2E-02	7.6E-01	7.6E+00	2.9E-02	2.9E-03
Cadmium	9.2E+02	0.00012	1.0	2.6E+00	0.0042	2.8E-01	1.0	2.8E-02	0.0416	1.0	2.7E+00	3.9E+00	3.9E+01	6.9E-01	6.9E-02
Chromium	1.1E+02	0.00012	1.0	3.3E-01	0.0042	8.3E-01	1.0	8.3E-02	0.0416	1.0	4.1E-01	3.8E+00	1.5E+01	1.1E-01	2.7E-02
Cobalt	1.1E+01	0.00012	1.0	3.1E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	8.1E-02	5.8E-02	5.8E-01	1.4E+00	1.4E-01
Copper	5.1E+02	0.00012	1.0	1.5E+00	0.0042	8.7E+00	1.0	8.7E-01	0.0416	1.0	2.3E+00	1.4E+01	1.9E+01	1.6E-01	1.2E-01
Lead	8.2E+02	0.00012	1.0	2.4E+00	0.0042	1.2E+00	1.0	1.2E-01	0.0416	1.0	2.5E+00	9.2E+00	9.2E+01	2.7E-01	2.7E-02
Manganese	6.8E+02	0.00012	1.0	2.0E+00	0.0042	2.9E+01	1.0	2.9E+00	0.0416	1.0	4.9E+00	1.0E+02	3.3E+02	4.8E-02	1.5E-02
Mercury	1.7E+01	0.00012	1.0	5.0E-02	0.0042	1.3E+00	1.0	1.3E-01	0.0416	1.0	1.8E-01	7.6E-02	3.8E-01	2.4E+00	4.7E-01
Nickel	8.6E+01	0.00012	1.0	2.5E-01	0.0042	***2.0E+00***	1.0	2.0E-01	0.0416	1.0	4.5E-01	4.6E+01	9.2E+01	9.7E-03	4.8E-03
Selenium	1.4E+00	0.00012	1.0	4.1E-03	0.0042	6.7E-01	1.0	6.7E-02	0.0416	1.0	7.1E-02	1.9E-01	3.2E-01	3.7E-01	2.2E-01
Silver	3.9E+00	0.00012	1.0	1.1E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	6.1E-02	1.8E-01	1.8E+00	3.4E-01	3.4E-02
Thallium	1.5E+00	0.00012	1.0	4.4E-03	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	5.4E-02	1.2E-02	1.2E-01	4.6E+00	4.6E-01
Vanadium	2.7E+01	0.00012	1.0	7.8E-02	0.0042	***5.0E-01***	1.0	5.0E-02	0.0416	1.0	1.3E-01	1.3E-01	1.3E+00	9.9E-01	9.9E-02
Zinc	2.2E+03	0.00012	1.0	6.4E+00	0.0042	4.2E+01	1.0	4.2E+00	0.0416	1.0	1.1E+01	2.3E+02	4.6E+02	4.6E-02	2.3E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workpla
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the mode equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level
LOAEL - Lowest Observable Adverse Effects Level
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected valu
Shaded cells indicated HQs equal to or greater than 1.0

Table 7-54
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site Q (South) (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs																(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.8E+01	6.5E+01	2.6E-02	7.1E-03
1,2-Dichlorobenzene	2.6E-01	0.0012	1.0	2.0E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.0E+02	1.4E+03	4.4E-03	3.2E-04
1,3-Dichlorobenzene	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.0E+02	1.4E+03	4.4E-03	3.2E-04
1,4-Dichlorobenzene	2.8E-01	0.0012	1.0	2.2E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.0E+02	1.8E+02	4.4E-03	2.5E-03
2,2'-Oxybis(1-Chloropropane)	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	3.7E+01	2.1E+02	1.2E-02	2.2E-03
2,4,5-Trichlorophenol	***2.8E-01***	0.0012	1.0	2.2E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.2E+01	3.6E+01	3.8E-02	1.3E-02
2,4,6-Trichlorophenol	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	6.0E+02	3.6E+01	7.6E-04	1.3E-02
2,4-Dichlorophenol	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	3.6E-01	3.6E+00	1.3E+00	1.3E-01
2,4-Dinitrophenol	***1.4E+00***	0.0012	1.0	1.1E-01	0.0090	***4.2E+00***	1.0	0.67	1.7E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.3E+00	1.6E-03	1.6E-02	1.4E+03	1.4E+02
2,4-Dinitrotoluene	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	3.0E-01	2.2E+00	1.5E+00	2.0E-01
2,6-Dinitrotoluene	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	8.5E-01	8.5E+00	5.4E-01	5.4E-02
2-Chloronaphthalene	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	2.6E+01	6.3E+01	1.8E-02	7.3E-03
2-Chlorophenol	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	6.0E+01	6.0E+00	7.6E-03	7.6E-02
2-Methylnaphthalene	2.5E-01	0.0012	1.0	2.0E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	3.0E+03	3.0E+04	1.5E-04	1.5E-05
2-Methylphenol (o-Cresol)	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	2.8E+02	2.8E+03	1.6E-03	1.6E-04
2-Nitroaniline	***1.4E+00***	0.0012	1.0	1.1E-01	0.0090	***4.2E+00***	1.0	0.67	1.7E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.3E+00	5.1E+00	5.1E+01	4.6E-01	4.6E-02
2-Nitrophenol	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	3.0E+00	8.5E+00	1.5E-01	5.4E-02
3,3'-Dichlorobenzidine	***5.5E-01***	0.0012	1.0	4.3E-02	0.0090	***1.7E+00***	1.0	0.67	6.8E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	9.2E-01	1.6E+01	5.3E+02	5.9E-02	1.7E-03
3/4-Methylphenol (m&p-Cresol)	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	2.8E+02	2.8E+03	1.6E-03	1.6E-04
3-Nitroaniline	***1.4E+00***	0.0012	1.0	1.1E-01	0.0090	***4.2E+00***	1.0	0.67	1.7E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.3E+00	5.1E+00	5.1E+01	4.6E-01	4.6E-02
4,6-Dinitro-2-methylphenol	***1.4E+00***	0.0012	1.0	1.1E-01	0.0090	***4.2E+00***	1.0	0.67	1.7E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.3E+00	3.0E-01	5.5E+00	7.7E+00	4.2E-01
4-Bromophenyl Phenyl Ether	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.2E+00	9.7E+00	3.8E-01	4.7E-02
4-Chloro-3-methylphenol	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.4E+02	1.4E+03	3.4E-03	3.4E-04
4-Chloroaniline	5.5E-01	0.0012	1.0	4.3E-02	0.0090	***1.7E+00***	1.0	0.67	6.8E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	9.2E-01	1.5E+00	1.5E+01	6.1E-01	6.1E-02
4-Chlorophenyl Phenyl Ether	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.2E+00	9.7E+00	3.8E-01	4.7E-02
4-Nitroaniline	***1.4E+00***	0.0012	1.0	1.1E-01	0.0090	***4.2E+00***	1.0	0.67	1.7E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.3E+00	5.1E+00	5.1E+01	4.6E-01	4.6E-02
4-Nitrophenol	***1.4E+00***	0.0012	1.0	1.1E-01	0.0090	***4.2E+00***	1.0	0.67	1.7E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.3E+00	3.0E+00	8.5E+00	7.7E-01	2.7E-01
Acenaphthene	1.8E-01	0.0012	1.0	1.4E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.5E-01	1.8E+01	3.6E+01	2.5E-02	1.2E-02
Acenaphthylene	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.8E+01	3.6E+01	2.5E-02	1.3E-02
Anthracene	2.9E-01	0.0012	1.0	2.3E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.0E+02	1.0E+03	4.4E-03	4.4E-04
Benzo(a)anthracene	5.9E-01	0.0012	1.0	4.6E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.8E-01	1.0E+00	1.0E+01	4.6E-01	4.6E-02
Benzo(a)pyrene	5.9E-01	0.0012	1.0	4.6E-02	0.0090	8.3E-01	1.0	0.67	3.3E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.8E-01	1.0E+00	1.0E+01	4.6E-01	4.6E-02
Benzo(b)fluoranthene	6.4E-01	0.0012	1.0	5.0E-02	0.0090	8.4E-01	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.8E-01	1.0E+00	1.0E+01	4.6E-01	4.6E-02
Benzo(g,h,i)perylene	3.6E-01	0.0012	1.0	2.8E-02	0.0090	8.1E-01	1.0	0.67	3.2E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.5E-01	1.0E+00	1.0E+01	4.3E-01	4.3E-02
Benzo(k)fluoranthene	4.7E-01	0.0012	1.0	3.7E-02	0.0090	8.3E-01	1.0	0.67	3.3E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.7E-01	1.0E+00	1.0E+01	4.5E-01	4.5E-02
bis(2-Chloroethoxy)methane	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	3.7E+01	2.1E+02	1.2E-02	2.2E-03
bis(2-Chloroethyl)ether	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	3.7E+01	2.1E+02	1.2E-02	2.2E-03
bis(2-Ethylhexyl)phthalate	1.2E+00	0.0012	1.0	9.2E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.3E+01	1.3E+02	4.2E-02	4.2E-03
Butyl Benzyl Phthalate	3.1E-01	0.0012	1.0	2.4E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.9E+01	5.7E+01	2.4E-02	8.1E-03
Carbazole	2.2E-01	0.0012	1.0	1.7E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.5E-01	3.1E+00	3.1E+01	1.5E-01	1.5E-02
Chrysene	6.3E-01	0.0012	1.0	4.9E-02	0.0090	8.3E-01	1.0	0.67	3.3E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.8E-01	1.0E+00	1.0E+01	4.6E-01	4.6E-02
Dibenzo(a,h)anthracene	2.7E-01	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.0E+00	1.0E+01	4.4E-01	4.4E-02
Dibenzofuran	2.5E-01	0.0012	1.0	1.9E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.6E-02	1.6E-01	2.9E+01	2.9E+00
Diethyl Phthalate	2.7E-01	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	5.6E+03	5.6E+04	8.2E-05	8.2E-06
Dimethyl Phthalate	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	4.8E+03	4.8E+04	9.6E-05	9.6E-06
Di-n-butylphthalate	2.4E-01	0.0012	1.0	1.9E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	4.3E+02	1.4E+03	1.1E-03	3.2E-04
Di-n-octylphthalate	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	8.3E-01	1.0	0.67	3.3E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.5E-01	5.7E+02	1.9E+03	7.9E-04	2.4E-04
Fluoranthene	1.1E+00	0.0012	1.0	8.7E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.3E+01	2.6E+01	4.0E-02	2.0E-02
Fluorene	2.5E-01	0.0012	1.0	2.0E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.3E+01	2.6E+01	3.5E-02	1.8E-02
Hexachlorobenzene	2.7E-01	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	9.7E-02	3.5E-01	4.7E+00	1.3E+00
Hexachlorobutadiene	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	2.4E-01	2.4E-01	1.9E+00	1.9E+00
Hexachlorocyclopentadiene	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	7.2E-01	1.3E+00	6.3E-01	3.5E-01
Hexachloroethane	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.2E-01	1.8E+00	3.8E+00	2.5E-01
Indeno(1,2,3-cd)pyrene	2.9E-01	0.0012	1.0	2.2E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.0E+00	1.0E+01	4.4E-01	4.4E-02
Isophorone	3.0E-01	0.0012	1.0	2.3E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	2.2E+01	2.2E+02	2.0E-02	2.1E-03
Naphthalene	2.7E-01	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	8.6E+00	1.7E+01	5.3E-02	2.7E-02
Nitrobenzene	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	4.8E-02	4.8E-01	9.6E+00	9.6E-01
N-Nitroso-di-n-propylamine	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.0E-02	1.0E-01	4.4E+01	4.4E+00
N-Nitrosodiphenylamine	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	2.4E+02	6.0E+01	1.9E-03	7.6E-03
Pentachlorophenol	2.4E-01	0.0012	1.0	1.9E-02	0.0090	3.4E-02	1.0	0.67	1.3E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	3.7E-02	4.3E-01	4.3E+00	8.7E-02	8.7E-03
Phenanthrene	7.7E-01	0.0012	1.0	6.0E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.0E-01	1.8E+01	3.6E+01	2.7E-02	1.4E-02
Phenol	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	7.2E+01	1.4E+02	6.3E-03	3.2E-03
Pyrene	1.1E+00	0.0012	1.0	8.8E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	7.8E+00	1.3E+01	6.7E-02	4.0E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-54
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site Q (South) (Average Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																NOAEL	LOAEL	NOAEL HQ	LOAEL HQ
Pesticides																			
4,4'-DDD	1.3E-02	0.0012	1.0	1.0E-03	0.0090	***1.8E-02***	1.0	0.67	7.1E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.1E-03	3.4E-01	1.7E+00	2.7E-02	5.3E-03
4,4'-DDE	6.2E-02	0.0012	1.0	4.8E-03	0.0090	2.6E-02	1.0	0.67	1.0E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.6E-02	3.4E-01	1.7E+00	4.7E-02	9.4E-03
4,4'-DDT	3.8E-01	0.0012	1.0	2.9E-02	0.0090	1.8E-01	1.0	0.67	7.4E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.0E-01	3.4E-01	1.7E+00	3.0E-01	6.1E-02
Aldrin	6.6E-03	0.0012	1.0	5.2E-04	0.0090	***8.8E-03***	1.0	0.67	3.6E-03	1.9E-03	0.33	3.7E-04	0.015	1.0	4.4E-03	3.1E-01	1.6E+00	1.4E-02	2.8E-03
alpha-BHC	2.0E-02	0.0012	1.0	1.6E-03	0.0090	7.8E-03	1.0	0.67	3.2E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	5.2E-03	2.5E+00	5.1E+00	2.1E-03	1.0E-03
alpha-Chlordane	9.7E-03	0.0012	1.0	7.6E-04	0.0090	1.2E-02	1.0	0.67	4.8E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	6.1E-03	5.2E+00	1.0E+01	1.2E-03	5.9E-04
beta-BHC	6.6E-03	0.0012	1.0	5.1E-04	0.0090	1.2E-02	1.0	0.67	4.7E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	5.7E-03	6.3E-01	3.2E+00	9.1E-03	1.8E-03
delta-BHC	***6.6E-03***	0.0012	1.0	5.1E-04	0.0090	8.1E-03	1.0	0.67	3.3E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	4.1E-03	2.5E+00	5.1E+00	1.6E-03	8.1E-04
Dieldrin	6.2E-02	0.0012	1.0	4.8E-03	0.0090	1.1E-01	1.0	0.67	4.6E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	5.2E-02	1.7E-02	1.7E-01	3.1E+00	3.1E-01
Endosulfan I	***6.6E-03***	0.0012	1.0	5.1E-04	0.0090	***8.8E-03***	1.0	0.67	3.6E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	4.6E-03	5.9E-01	5.9E+00	7.7E-03	7.7E-04
Endosulfan II	1.3E-02	0.0012	1.0	9.8E-04	0.0090	***1.8E-02***	1.0	0.67	7.1E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.1E-03	5.9E-01	5.9E+00	1.5E-02	1.5E-03
Endosulfan Sulfate	1.0E-02	0.0012	1.0	8.0E-04	0.0090	1.6E-02	1.0	0.67	6.3E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	8.0E-03	5.9E-01	5.9E+00	1.4E-02	1.4E-03
Endrin	1.9E-02	0.0012	1.0	1.5E-03	0.0090	***1.8E-02***	1.0	0.67	7.1E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.6E-03	9.4E-02	9.4E-01	1.0E-01	1.0E-02
Endrin Aldehyde	1.2E-02	0.0012	1.0	9.7E-04	0.0090	***1.8E-02***	1.0	0.67	7.1E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	9.1E-03	9.4E-02	9.4E-01	9.6E-02	9.6E-03
Endrin Ketone	1.8E-02	0.0012	1.0	1.4E-03	0.0090	1.7E-02	1.0	0.67	6.8E-03	4.2E-03	0.33	8.3E-04	0.015	1.0	9.0E-03	9.4E-02	9.4E-01	9.6E-02	9.6E-03
gamma-BHC (Lindane)	6.4E-03	0.0012	1.0	5.0E-04	0.0090	***8.8E-03***	1.0	0.67	3.6E-03	1.5E-03	0.33	3.0E-04	0.015	1.0	4.4E-03	2.7E+01	2.7E+02	1.6E-04	1.6E-05
gamma-Chlordane	4.5E-02	0.0012	1.0	3.5E-03	0.0090	8.3E-03	1.0	0.67	3.3E-03	1.6E-03	0.33	3.2E-04	0.015	1.0	7.1E-03	5.2E+00	1.0E+01	1.4E-03	6.9E-04
Heptachlor	***6.6E-03***	0.0012	1.0	5.1E-04	0.0090	8.0E-03	1.0	0.67	3.2E-03	1.7E-03	0.33	3.4E-04	0.015	1.0	4.1E-03	7.0E-02	7.0E-01	5.8E-02	5.8E-03
Heptachlor Epoxide	1.2E-02	0.0012	1.0	9.2E-04	0.0090	***8.8E-03***	1.0	0.67	3.6E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	5.0E-03	9.5E-04	7.0E-03	5.2E+00	7.1E-01
Methoxychlor	7.9E-02	0.0012	1.0	6.2E-03	0.0090	6.4E-02	1.0	0.67	2.6E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	3.7E-02	2.0E+00	4.0E+00	1.9E-02	9.4E-03
Toxaphene	***6.6E-01***	0.0012	1.0	5.1E-02	0.0090	***8.8E-01***	1.0	0.67	3.6E-01	***2.6E-01***	0.33	5.0E-02	0.015	1.0	4.6E-01	7.9E+00	7.9E+01	5.8E-02	5.8E-03
Herbicides																			
2,4-D	1.2E-02	0.0012	1.0	9.1E-04	0.0090	5.9E-02	1.0	0.67	2.4E-02	1.1E-01	0.33	2.2E-02	0.015	1.0	4.6E-02	1.9E+00	9.4E+00	2.5E-02	4.9E-03
2,4-DB	1.0E-02	0.0012	1.0	8.1E-04	0.0090	***2.6E-02***	1.0	0.67	1.0E-02	2.0E-02	0.33	4.0E-03	0.015	1.0	1.5E-02	3.1E+00	9.6E+00	5.0E-03	1.6E-03
2,4,5-T	9.7E-03	0.0012	1.0	7.6E-04	0.0090	2.6E-02	1.0	0.67	1.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	1.4E-02	3.6E+00	1.2E+01	3.7E-03	1.1E-03
2,4,5-TP (Silvex)	9.5E-03	0.0012	1.0	7.4E-04	0.0090	2.5E-02	1.0	0.67	1.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	1.3E-02	1.1E+00	3.7E+00	1.2E-02	3.6E-03
Dalapon	***1.8E+00***	0.0012	1.0	1.4E-01	0.0090	***6.3E+00***	1.0	0.67	2.5E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.2E+00	1.0E+01	3.5E+01	3.2E-01	9.4E-02
Dicamba	2.0E-02	0.0012	1.0	1.5E-03	0.0090	***6.3E-02***	1.0	0.67	2.5E-02	***3.0E-02***	0.33	5.9E-03	0.015	1.0	3.3E-02	3.9E+00	1.3E+01	8.4E-03	2.5E-03
Dichlorprop	9.9E-02	0.0012	1.0	7.7E-03	0.0090	***3.1E-01***	1.0	0.67	1.3E-01	***1.5E-01***	0.33	3.0E-02	0.015	1.0	1.6E-01	2.1E-01	2.1E+00	7.8E-01	7.8E-02
Dinoseb	***2.7E-01***	0.0012	1.0	2.1E-02	0.0090	***8.4E-01***	1.0	0.67	3.4E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	4.6E-01	1.2E-01	1.2E+00	3.8E+00	3.8E-01
MCPA	2.4E+00	0.0012	1.0	1.9E-01	0.0090	4.1E+01	1.0	0.67	1.7E+01	***3.0E+00***	0.33	5.9E-01	0.015	1.0	1.7E+01	2.2E-01	1.1E+00	7.8E+01	1.6E+01
MCPP	3.6E+00	0.0012	1.0	2.8E-01	0.0090	***6.3E+00***	1.0	0.67	2.5E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.4E+00	3.6E-01	1.1E+00	9.3E+00	3.1E+00
PCBs																			
Total PCBs	2.4E+00	0.0012	1.0	1.9E-01	0.0090	3.3E+00	1.0	0.67	1.3E+00	3.8E-02	0.33	7.5E-03	0.015	1.0	1.5E+00	1.2E-01	1.2E+00	1.3E+01	1.3E+00
Dioxins/Furans																			
TEQ	9.2E-04	0.0012	1.0	7.2E-05	0.0090	6.3E-06	1.0	0.67	2.5E-06	2.4E-04	0.33	4.8E-05	0.015	1.0	1.2E-04	1.2E-06	1.2E-05	1.0E+02	1.0E+01
Metals*																			
Aluminum	9.3E+03	0.0012	1.0	7.2E+02	0.0090	6.7E+02	1.0	0.67	2.7E+02	3.3E+01	0.33	6.5E+00	0.015	1.0	1.0E+03	2.0E+00	2.0E+01	5.0E+02	5.0E+01
Antimony	4.9E+00	0.0012	1.0	3.8E-01	0.0090	9.3E-01	1.0	0.67	3.7E-01	***8.5E-01***	0.33	1.7E-01	0.015	1.0	9.2E-01	1.3E-01	1.3E+00	7.1E+00	7.1E-01
Arsenic	9.1E+00	0.0012	1.0	7.1E-01	0.0090	5.2E+00	1.0	0.67	2.1E+00	***4.2E-01***	0.33	8.2E-02	0.015	1.0	2.9E+00	1.4E-01	1.4E+00	2.1E+01	2.1E+00
Barium	4.8E+02	0.0012	1.0	3.8E+01	0.0090	1.4E+01	1.0	0.67	5.6E+00	2.5E+00	0.33	5.0E-01	0.015	1.0	4.4E+01	1.1E+01	4.4E+01	3.9E+00	9.9E-01
Beryllium	6.5E-01	0.0012	1.0	5.1E-02	0.0090	***2.0E-01***	1.0	0.67	7.9E-02	***1.7E-01***	0.33	3.3E-02	0.015	1.0	1.6E-01	8.0E-01	8.0E+00	2.0E-01	2.0E-02
Cadmium	3.1E+02	0.0012	1.0	2.5E+01	0.0090	1.1E+00	1.0	0.67	4.3E-01	8.6E-01	0.33	1.7E-01	0.015	1.0	2.5E+01	5.8E+00	5.8E+01	4.3E+00	4.3E-01
Chromium	6.4E+01	0.0012	1.0	5.0E+00	0.0090	1.3E+00	1.0	0.67	5.1E-01	1.8E-01	0.33	3.5E-02	0.015	1.0	5.6E+00	4.0E+00	1.6E+01	1.4E+00	3.5E-01
Cobalt	9.4E+00	0.0012	1.0	7.3E-01	0.0090	1.5E+00	1.0	0.67	6.2E-01	***4.2E-01***	0.33	8.2E-02	0.015	1.0	1.4E+00	6.0E-02	6.0E-01	2.4E+01	2.4E+00
Copper	3.1E+02	0.0012	1.0	2.4E+01	0.0090	4.6E+00	1.0	0.67	1.9E+00	2.8E+01	0.33	5.4E+00	0.015	1.0	3.1E+01	1.5E+01	2.0E+01	2.1E+00	1.6E+00
Lead	5.0E+02	0.0012	1.0	3.9E+01	0.0090	3.9E+00	1.0	0.67	1.6E+00	5.7E-01	0.33	1.1E-01	0.015	1.0	4.1E+01	9.7E+00	9.7E+01	4.2E+00	4.2E-01
Manganese	5.5E+02	0.0012	1.0	4.3E+01	0.0090	3.1E+01	1.0	0.67	1.2E+01	1.6E+01	0.33	3.2E+00	0.015	1.0	5.8E+01	1.1E+02	3.4E+02	5.5E-01	1.7E-01
Mercury	6.3E+00	0.0012	1.0	4.9E-01	0.0090	2.4E-02	1.0	0.67	9.8E-03	1.5E-01	0.33	2.9E-02	0.015	1.0	5.3E-01	9.9E-02	4.9E-01	5.4E+00	1.1E+00
Nickel	5.0E+01	0.0012	1.0	3.9E+00	0.0090	1.8E+00	1.0	0.67	7.3E-01	***1.7E+00***	0.33	3.3E-01	0.015	1.0	4.9E+00	4.8E+01	9.7E+01	1.0E-01	5.1E-02
Selenium	1.2E+00	0.0012	1.0	9.2E-02	0.0090	5.4E-01	1.0	0.67	2.2E-01	***4.2E-01***	0.33	8.2E-02	0.015	1.0	3.9E-01	1.9E-01	3.2E-01	2.0E+00	1.2E+00
Silver	2.4E+00	0.0012	1.0	1.9E-01	0.0090	***4.9E-01***	1.0	0.67	2.0E-01	4.9E-01	0.33	9.8E-02	0.015	1.0	4.8E-01	1.9E-01	1.9E+00	2.5E+00	2.5E-01
Thallium	1.3E+00	0.0012	1.0	9.8E-02	0.0090	***4.9E-01***	1.0	0.67	2.0E-01	***4.2E-01***	0.33	8.2E-02	0.015	1.0	3.8E-01	1.4E-02	1.4E-01	2.8E+01	2.8E+00
Vanadium	2.5E+01	0.0012	1.0	2.0E+00	0.0090	1.9E+00	1.0	0.67	7.5E-01	***4.2E-01***	0.33	8.2E-02	0.015	1.0	2.8E+00	1.1E-01	1.1E+00	2.5E+01	2.5E+00
Zinc	1.3E+03	0.0012	1.0	1.0E+02	0.0090	3.1E+01	1.0	0.67	1.3E+01	5.3E+01	0.33	1.0E+01	0.015	1.0	1.2E+02	2.6E+02	5.1E+02	4.8E-01	2.4E-01

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-55
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site Q (South) (95% UCL Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
SVOCs																(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
1,2,4-Trichlorobenzene	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.8E+01	6.5E+01	3.0E-02	8.2E-03
1,2-Dichlorobenzene	3.9E-01	0.0012	1.0	3.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.0E+02	1.4E+03	5.1E-03	3.7E-04
1,3-Dichlorobenzene	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.0E+02	1.4E+03	5.1E-03	3.7E-04
1,4-Dichlorobenzene	4.1E-01	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.0E+02	1.8E+02	5.1E-03	2.9E-03
2,2'-Oxybis(1-Chloropropane)	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	3.7E+01	2.1E+02	1.4E-02	2.6E-03
2,4,5-Trichlorophenol	***4.2E-01***	0.0012	1.0	3.3E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.2E+01	3.6E+01	4.4E-02	1.5E-02
2,4,6-Trichlorophenol	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	6.0E+02	3.6E+01	8.8E-04	1.5E-02
2,4-Dichlorophenol	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	3.6E-01	3.6E+00	1.5E+00	1.5E-01
2,4-Dinitrophenol	***2.1E+00***	0.0012	1.0	1.6E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.7E+00	1.6E-03	1.6E-02	1.6E+03	1.6E+02
2,4-Dinitrotoluene	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	3.0E-01	2.2E+00	1.8E+00	2.4E-01
2,6-Dinitrotoluene	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	8.5E-01	8.5E+00	6.3E-01	6.3E-02
2-Chloronaphthalene	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	2.6E+01	6.3E+01	2.0E-02	8.5E-03
2-Chlorophenol	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	6.0E+01	6.0E+00	8.8E-03	8.8E-02
2-Methylnaphthalene	3.9E-01	0.0012	1.0	3.0E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	3.0E+03	3.0E+04	1.8E-04	1.8E-05
2-Methylphenol (o-Cresol)	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	2.8E+02	2.8E+03	1.9E-03	1.9E-04
2-Nitroaniline	***2.1E+00***	0.0012	1.0	1.6E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.7E+00	5.1E+00	5.1E+01	5.3E-01	5.3E-02
2-Nitrophenol	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	3.0E+00	8.5E+00	1.8E-01	6.3E-02
3,3'-Dichlorobenzidine	***8.1E-01***	0.0012	1.0	6.3E-02	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.1E+00	1.6E+01	5.3E+02	6.8E-02	2.0E-03
3/4-Methylphenol (m&p-Cresol)	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	2.8E+02	2.8E+03	1.9E-03	1.9E-04
3-Nitroaniline	***2.1E+00***	0.0012	1.0	1.6E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.7E+00	5.1E+00	5.1E+01	5.3E-01	5.3E-02
4,6-Dinitro-2-methylphenol	***2.1E+00***	0.0012	1.0	1.6E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.7E+00	3.0E-01	5.5E+00	8.9E+00	4.9E-01
4-Bromophenyl Phenyl Ether	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.2E+00	9.7E+00	4.4E-01	5.5E-02
4-Chloro-3-methylphenol	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.4E+02	1.4E+03	3.9E-03	3.9E-04
4-Chloroaniline	8.1E-01	0.0012	1.0	6.3E-02	0.0090	***2.0E+00***	1.0	0.67	8.0E-01	***1.0E+00***	0.33	2.0E-01	0.015	1.0	1.1E+00	1.5E+00	1.5E+01	7.1E-01	7.1E-02
4-Chlorophenyl Phenyl Ether	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.2E+00	9.7E+00	4.4E-01	5.5E-02
4-Nitroaniline	***2.1E+00***	0.0012	1.0	1.6E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.7E+00	5.1E+00	5.1E+01	5.3E-01	5.3E-02
4-Nitrophenol	***2.1E+00***	0.0012	1.0	1.6E-01	0.0090	***5.0E+00***	1.0	0.67	2.0E+00	***2.6E+00***	0.33	5.0E-01	0.015	1.0	2.7E+00	3.0E+00	8.5E+00	8.9E-01	3.2E-01
Acenaphthene	2.1E-01	0.0012	1.0	1.6E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	1.8E+01	3.6E+01	2.8E-02	1.4E-02
Acenaphthylene	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.8E+01	3.6E+01	2.9E-02	1.5E-02
Anthracene	4.1E-01	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.0E+02	1.0E+03	5.1E-03	5.1E-04
Benzo(a)anthracene	9.9E-01	0.0012	1.0	7.7E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+00	1.0E+01	5.5E-01	5.5E-02
Benzo(a)pyrene	1.0E+00	0.0012	1.0	8.0E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+00	1.0E+01	5.6E-01	5.6E-02
Benzo(b)fluoranthene	1.1E+00	0.0012	1.0	8.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+00	1.0E+01	5.6E-01	5.6E-02
Benzo(g,h,i)perylene	6.5E-01	0.0012	1.0	5.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.5E-01	1.0E+00	1.0E+01	5.3E-01	5.3E-02
Benzo(k)fluoranthene	8.2E-01	0.0012	1.0	6.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.6E-01	1.0E+00	1.0E+01	5.4E-01	5.4E-02
bis(2-Chloroethoxy)methane	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	3.7E+01	2.1E+02	1.4E-02	2.6E-03
bis(2-Chloroethyl)ether	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	3.7E+01	2.1E+02	1.4E-02	2.6E-03
bis(2-Ethylhexyl)phthalate	2.2E+00	0.0012	1.0	1.7E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.7E-01	1.3E+01	1.3E+02	5.3E-02	5.3E-03
Butyl Benzyl Phthalate	4.5E-01	0.0012	1.0	3.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.4E-01	1.9E+01	5.7E+01	2.8E-02	9.4E-03
Carbazole	2.6E-01	0.0012	1.0	2.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.2E-01	3.1E+00	3.1E+01	1.7E-01	1.7E-02
Chrysene	1.1E+00	0.0012	1.0	8.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.8E-01	1.0E+00	1.0E+01	5.6E-01	5.6E-02
Dibenzo(a,h)anthracene	4.0E-01	0.0012	1.0	3.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.0E+00	1.0E+01	5.1E-01	5.1E-02
Dibenzofuran	3.8E-01	0.0012	1.0	3.0E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.6E-02	1.6E-01	3.3E+01	3.3E+00
Diethyl Phthalate	4.0E-01	0.0012	1.0	3.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	5.6E+03	5.6E+04	9.5E-05	9.5E-06
Dimethyl Phthalate	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	4.8E+03	4.8E+04	1.1E-04	1.1E-05
Di-n-butylphthalate	3.8E-01	0.0012	1.0	2.9E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	4.3E+02	1.4E+03	1.2E-03	3.7E-04
Di-n-octylphthalate	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	5.7E+02	1.9E+03	9.3E-04	2.8E-04
Fluoranthene	1.9E+00	0.0012	1.0	1.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.5E-01	1.3E+01	2.6E+01	5.0E-02	2.5E-02
Fluorene	3.9E-01	0.0012	1.0	3.0E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.3E+01	2.6E+01	4.1E-02	2.0E-02
Hexachlorobenzene	4.0E-01	0.0012	1.0	3.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	9.7E-02	3.5E-01	5.5E+00	1.5E+00
Hexachlorobutadiene	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	2.4E-01	2.4E-01	2.2E+00	2.2E+00
Hexachlorocyclopentadiene	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	7.2E-01	1.3E+00	7.3E-01	4.0E-01
Hexachloroethane	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.2E-01	1.8E+00	4.4E+00	2.9E-01
Indeno(1,2,3-cd)pyrene	4.4E-01	0.0012	1.0	3.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.0E+00	1.0E+01	5.1E-01	5.1E-02
Isophorone	4.3E-01	0.0012	1.0	3.4E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	2.2E+01	2.2E+02	2.4E-02	2.5E-03
Naphthalene	4.0E-01	0.0012	1.0	3.1E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	8.6E+00	1.7E+01	6.2E-02	3.1E-02
Nitrobenzene	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	4.8E-02	4.8E-01	1.1E+01	1.1E+00
N-Nitroso-di-n-propylamine	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.0E-02	1.0E-01	5.1E+01	5.1E+00
N-Nitrosodiphenylamine	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	2.4E+02	6.0E+01	2.2E-03	8.8E-03
Pentachlorophenol	5.5E-01	0.0012	1.0	4.3E-02	0.0090	***1.0E-01***	1.0	0.67	4.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	8.9E-02	4.3E-01	4.3E+00	2.1E-01	2.1E-02
Phenanthrene	1.3E+00	0.0012	1.0	1.0E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.0E-01	1.8E+01	3.6E+01	3.3E-02	1.7E-02
Phenol	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	7.2E+01	1.4E+02	7.3E-03	3.7E-03
Pyrene	1.9E+00	0.0012	1.0	1.5E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	6.5E-01	7.8E+00	1.3E+01	8.3E-02	5.0E-02

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values.
Shaded cells indicated HQs equal to or greater than 1.0.

Table 7-55
Hazard Quotients for Ingestion of Earthworms and Terrestrial Invertebrates
Short-Tailed Shrew
Site Q (South) (95% UCL Concentrations)
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Earthworm (mg/kg)	Area Use Factor (a)	Dietary Percentage of Earthworms (a)	Dose from Earthworms (mg/kg/day)	Concentration of Contaminant in Terrestrial Invertebrates (mg/kg)	Dietary Percentage of Terrestrial Invertebrates (a)	Dose from Terrestrial Invertebrates (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (b)		Hazard Quotient	
																NOAEL	LOAEL	NOAEL HQ	LOAEL HQ
Pesticides																			
4,4'-DDD	1.9E-02	0.0012	1.0	1.5E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.1E-02	3.4E-01	1.7E+00	3.1E-02	6.1E-03
4,4'-DDE	1.3E-01	0.0012	1.0	9.9E-03	0.0090	1.8E-01	1.0	0.67	7.2E-02	***5.0E-03***	0.33	9.8E-04	0.015	1.0	8.3E-02	3.4E-01	1.7E+00	2.4E-01	4.8E-02
4,4'-DDT	6.3E-01	0.0012	1.0	4.9E-02	0.0090	7.5E-01	1.0	0.67	3.0E-01	***5.0E-03***	0.33	9.8E-04	0.015	1.0	3.5E-01	3.4E-01	1.7E+00	1.0E+00	2.0E-01
Aldrin	9.6E-03	0.0012	1.0	7.5E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	5.3E-03	3.1E-01	1.6E+00	1.7E-02	3.4E-03
alpha-BHC	4.0E-02	0.0012	1.0	3.2E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	7.7E-03	2.5E+00	5.1E+00	3.0E-03	1.5E-03
alpha-Chlordane	1.6E-02	0.0012	1.0	1.3E-03	0.0090	5.1E-02	1.0	0.67	2.1E-02	***2.6E-03***	0.33	5.0E-04	0.015	1.0	2.2E-02	5.2E+00	1.0E+01	4.3E-03	2.1E-03
beta-BHC	9.6E-03	0.0012	1.0	7.5E-04	0.0090	4.7E-02	1.0	0.67	1.9E-02	***2.6E-03***	0.33	5.0E-04	0.015	1.0	2.0E-02	6.3E-01	3.2E+00	3.2E-02	6.4E-03
delta-BHC	***9.6E-03***	0.0012	1.0	7.5E-04	0.0090	1.2E-02	1.0	0.67	4.8E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	6.1E-03	2.5E+00	5.1E+00	2.4E-03	1.2E-03
Dieldrin	1.1E-01	0.0012	1.0	8.4E-03	0.0090	4.0E-01	1.0	0.67	1.6E-01	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.7E-01	1.7E-02	1.7E-01	1.0E+01	1.0E+00
Endosulfan I	***9.6E-03***	0.0012	1.0	7.5E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	5.3E-03	5.9E-01	5.9E+00	8.9E-03	8.9E-04
Endosulfan II	1.8E-02	0.0012	1.0	1.4E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.0E-02	5.9E-01	5.9E+00	1.8E-02	1.8E-03
Endosulfan Sulfate	1.5E-02	0.0012	1.0	1.1E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.0E-02	5.9E-01	5.9E+00	1.7E-02	1.7E-03
Endrin	3.3E-02	0.0012	1.0	2.6E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.2E-02	9.4E-02	9.4E-01	1.2E-01	1.2E-02
Endrin Aldehyde	1.8E-02	0.0012	1.0	1.4E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.0E-02	9.4E-02	9.4E-01	1.1E-01	1.1E-02
Endrin Ketone	3.0E-02	0.0012	1.0	2.3E-03	0.0090	***2.0E-02***	1.0	0.67	8.0E-03	***5.0E-03***	0.33	9.8E-04	0.015	1.0	1.1E-02	9.4E-02	9.4E-01	1.2E-01	1.2E-02
gamma-BHC (Lindane)	9.4E-03	0.0012	1.0	7.4E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	5.3E-03	2.7E+01	2.7E+02	2.0E-04	2.0E-05
gamma-Chlordane	9.0E-02	0.0012	1.0	7.0E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	1.2E-02	5.2E+00	1.0E+01	2.2E-03	1.1E-03
Heptachlor	***9.6E-03***	0.0012	1.0	7.5E-04	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	5.3E-03	7.0E-02	7.0E-01	7.6E-02	7.6E-03
Heptachlor Epoxide	1.9E-02	0.0012	1.0	1.5E-03	0.0090	***1.0E-02***	1.0	0.67	4.0E-03	***2.6E-03***	0.33	5.0E-04	0.015	1.0	6.0E-03	9.5E-04	7.0E-03	6.3E+00	8.6E-01
Methoxychlor	1.1E-01	0.0012	1.0	8.4E-03	0.0090	***1.0E-01***	1.0	0.67	4.0E-02	***2.6E-02***	0.33	5.0E-03	0.015	1.0	5.4E-02	2.0E+00	4.0E+00	2.7E-02	1.4E-02
Toxaphene	***9.6E-01***	0.0012	1.0	7.5E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***2.6E-01***	0.33	5.0E-02	0.015	1.0	5.3E-01	7.9E+00	7.9E+01	6.7E-02	6.7E-03
Herbicides																			
2,4-D	2.0E-02	0.0012	1.0	1.6E-03	0.0090	1.8E-01	1.0	0.67	7.2E-02	1.5E-01	0.33	3.0E-02	0.015	1.0	1.0E-01	1.9E+00	9.4E+00	5.5E-02	1.1E-02
2,4-DB	1.9E-02	0.0012	1.0	1.5E-03	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***2.8E-02***	0.33	5.5E-03	0.015	1.0	2.7E-02	3.1E+00	9.6E+00	8.9E-03	2.8E-03
2,4,5-T	1.8E-02	0.0012	1.0	1.4E-03	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	2.4E-02	3.6E+00	1.2E+01	6.6E-03	2.0E-03
2,4,5-TP (Silvex)	1.8E-02	0.0012	1.0	1.4E-03	0.0090	***5.0E-02***	1.0	0.67	2.0E-02	***1.3E-02***	0.33	2.5E-03	0.015	1.0	2.4E-02	1.1E+00	3.7E+00	2.1E-02	6.4E-03
Dalapon	***3.9E+00***	0.0012	1.0	3.1E-01	0.0090	***1.2E+01***	1.0	0.67	4.8E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	5.7E+00	1.0E+01	3.5E+01	5.6E-01	1.7E-01
Dicamba	4.0E-02	0.0012	1.0	3.2E-03	0.0090	***1.2E-01***	1.0	0.67	4.8E-02	***3.0E-02***	0.33	5.9E-03	0.015	1.0	5.7E-02	3.9E+00	1.3E+01	1.5E-02	4.4E-03
Dichlorprop	2.0E-01	0.0012	1.0	1.6E-02	0.0090	***6.0E-01***	1.0	0.67	2.4E-01	***1.5E-01***	0.33	3.0E-02	0.015	1.0	2.9E-01	2.1E-01	2.1E+00	1.4E+00	1.4E-01
Dinoseb	***4.1E-01***	0.0012	1.0	3.2E-02	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***5.0E-01***	0.33	9.8E-02	0.015	1.0	5.3E-01	1.2E-01	1.2E+00	4.4E+00	4.4E-01
MCPA	4.4E+00	0.0012	1.0	3.5E-01	0.0090	9.1E+01	1.0	0.67	3.7E+01	***3.0E+00***	0.33	5.9E-01	0.015	1.0	3.8E+01	2.2E-01	1.1E+00	1.7E+02	3.3E+01
MCPP	5.8E+00	0.0012	1.0	4.6E-01	0.0090	***1.2E+01***	1.0	0.67	4.8E+00	***3.0E+00***	0.33	5.9E-01	0.015	1.0	5.9E+00	3.6E-01	1.1E+00	1.6E+01	5.4E+00
PCBs																			
Total PCBs	4.1E+00	0.0012	1.0	3.2E-01	0.0090	1.7E+01	1.0	0.67	6.8E+00	5.1E-02	0.33	1.0E-02	0.015	1.0	7.1E+00	1.2E-01	1.2E+00	5.9E+01	5.9E+00
Dioxins/Furans																			
TEQ	1.7E-03	0.0012	1.0	1.3E-04	0.0090	2.2E-05	1.0	0.67	8.8E-06	4.9E-04	0.33	9.6E-05	0.015	1.0	2.4E-04	1.2E-06	1.2E-05	2.0E+02	2.0E+01
Metals*																			
Aluminum	1.0E+04	0.0012	1.0	8.0E+02	0.0090	1.9E+03	1.0	0.67	7.6E+02	3.5E+01	0.33	6.9E+00	0.015	1.0	1.6E+03	2.0E+00	2.0E+01	7.8E+02	7.8E+01
Antimony	8.9E+00	0.0012	1.0	6.9E-01	0.0090	***1.0E+00***	1.0	0.67	4.0E-01	***8.5E-01***	0.33	1.7E-01	0.015	1.0	1.3E+00	1.3E-01	1.3E+00	9.7E+00	9.7E-01
Arsenic	1.2E+01	0.0012	1.0	9.1E-01	0.0090	7.3E+00	1.0	0.67	2.9E+00	***4.2E-01***	0.33	8.2E-02	0.015	1.0	3.9E+00	1.4E-01	1.4E+00	2.9E+01	2.9E+00
Barium	6.4E+02	0.0012	1.0	5.0E+01	0.0090	3.6E+01	1.0	0.67	1.4E+01	3.2E+00	0.33	6.3E-01	0.015	1.0	6.5E+01	1.1E+01	4.4E+01	5.7E+00	1.5E+00
Beryllium	7.2E-01	0.0012	1.0	5.6E-02	0.0090	***2.0E-01***	1.0	0.67	8.0E-02	***1.7E-01***	0.33	3.3E-02	0.015	1.0	1.7E-01	8.0E-01	8.0E+00	2.1E-01	2.1E-02
Cadmium	9.2E+02	0.0012	1.0	7.2E+01	0.0090	1.5E+00	1.0	0.67	6.0E-01	1.6E+00	0.33	3.2E-01	0.015	1.0	7.2E+01	5.8E+00	5.8E+01	1.2E+01	1.2E+00
Chromium	1.1E+02	0.0012	1.0	8.9E+00	0.0090	3.4E+00	1.0	0.67	1.4E+00	1.9E-01	0.33	3.8E-02	0.015	1.0	1.0E+01	4.0E+00	1.6E+01	2.6E+00	6.5E-01
Cobalt	1.1E+01	0.0012	1.0	8.5E-01	0.0090	2.1E+00	1.0	0.67	8.4E-01	***4.2E-01***	0.33	8.2E-02	0.015	1.0	1.8E+00	6.0E-02	6.0E-01	2.9E+01	2.9E+00
Copper	5.1E+02	0.0012	1.0	4.0E+01	0.0090	1.0E+01	1.0	0.67	4.0E+00	3.2E+01	0.33	6.3E+00	0.015	1.0	5.0E+01	1.5E+01	2.0E+01	3.3E+00	2.5E+00
Lead	8.2E+02	0.0012	1.0	6.4E+01	0.0090	8.4E+00	1.0	0.67	3.4E+00	7.5E-01	0.33	1.5E-01	0.015	1.0	6.7E+01	9.7E+00	9.7E+01	6.9E+00	6.9E-01
Manganese	6.8E+02	0.0012	1.0	5.3E+01	0.0090	5.2E+01	1.0	0.67	2.1E+01	2.6E+01	0.33	5.1E+00	0.015	1.0	7.9E+01	1.1E+02	3.4E+02	7.5E-01	2.3E-01
Mercury	1.7E+01	0.0012	1.0	1.3E+00	0.0090	***9.5E-02***	1.0	0.67	3.8E-02	1.7E-01	0.33	3.4E-02	0.015	1.0	1.4E+00	9.9E-02	4.9E-01	1.4E+01	2.9E+00
Nickel	8.6E+01	0.0012	1.0	6.7E+00	0.0090	2.8E+00	1.0	0.67	1.1E+00	***1.7E+00***	0.33	3.3E-01	0.015	1.0	8.1E+00	4.8E+01	9.7E+01	1.7E-01	8.4E-02
Selenium	1.4E+00	0.0012	1.0	1.1E-01	0.0090	7.2E-01	1.0	0.67	2.9E-01	***4.2E-01***	0.33	8.2E-02	0.015	1.0	4.8E-01	1.9E-01	3.2E-01	2.5E+00	1.5E+00
Silver	3.9E+00	0.0012	1.0	3.1E-01	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	5.7E-01	0.33	1.1E-01	0.015	1.0	6.2E-01	1.9E-01	1.9E+00	3.3E+00	3.3E-01
Thallium	1.5E+00	0.0012	1.0	1.2E-01	0.0090	***5.0E-01***	1.0	0.67	2.0E-01	***4.2E-01***	0.33	8.2E-02	0.015	1.0	4.0E-01	1.4E-02	1.4E-01	3.0E+01	3.0E+00
Vanadium	2.7E+01	0.0012	1.0	2.1E+00	0.0090	4.7E+00	1.0	0.67	1.9E+00	***4.2E-01***	0.33	8.2E-02	0.015	1.0	4.1E+00	1.1E-01	1.1E+00	3.7E+01	3.7E+00
Zinc	2.2E+03	0.0012	1.0	1.7E+02	0.0090	4.7E+01	1.0	0.67	1.9E+01	5.7E+01	0.33	1.1E+01	0.015	1.0	2.0E+02	2.6E+02	5.1E+02	7.9E-01	4.0E-01

NOTES:
(a) - Values and references for these variables are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - See Table III-C1

LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values.
Shaded cells indicated HQs equal to or greater than 1.0.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

Table 7-56
COPECs for Site Q (South)
Sauget, IL

Soil HQs	Short-tailed Shrew Modeling HQs (Average Conc.)	Short-tailed Shrew Modeling HQs (95% UCL Conc.)	Prairie Vole Modeling HQs (Average Conc.)	Prairie Vole Modeling HQs (95% UCL Conc.)
Tetrachloroethene	Dieldrin (NOAEL only)	Dibenzofuran	Dioxins/furans (NOAEL only)	Dioxins/furans (NOAEL only)
Trichloroethylene	Hepatachlor epoxide (NOAEL only)	Hexachlorobenzene	Aluminum	Antimony (NOAEL only)
Xylenes (total)	PCBs	4,4'-DDT (NOAEL only)	Cobalt (NOAEL only)	Cobalt (NOAEL only)
Anthracene	Dioxins/furans	Dieldrin		Mercury (NOAEL only)
Benzo(a)anthracene	Aluminum	Hepatachlor epoxide (NOAEL only)		Thallium (NOAEL only)
Benzo(a)pyrene	Antimony (NOAEL only)	MCPA		
Benzo(b)fluoranthene	Barium (NOAEL only)	PCBs		
Benzo(k)fluoranthene	Cadmium (NOAEL only)	Dioxins/furans		
bis(2-Ethylhexyl)phthalate	Chromium (NOAEL only)	Aluminum		
Dibenzo(a,h)anthracene	Cobalt	Antimony (NOAEL only)		
Fluoranthene	Copper	Arsenic		
Indeno(1,2,3-cd)pyrene	Lead (NOAEL only)	Barium		
Pentachlorophenol	Mercury	Cadmium		
Phenanthrene	Silver (NOAEL only)	Chromium (NOAEL only)		
Pyrene	Thallium	Cobalt		
4,4'-DDD	Vanadium	Copper		
4,4'-DDE		Lead (NOAEL only)		
4,4'-DDT		Mercury		
Aldrin		Selenium		
alpha-BHC		Silver (NOAEL only)		
beta-BHC		Thallium		
Dieldrin		Vanadium		
Endrin				
gamma-BHC (Lindane)				
Dioxins/furans				
Aluminum				
Antimony				
Arsenic				
Barium				
Cadmium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Manganese				
Mercuy				
Nickel				
Selenium				
Silver				
Thallium				
Vanadium				
Zinc				

NOTES:
Analytes listed are only for those exceeding their benchmark/TRV, based on detected values, and were above the background values.
Shaded entries are for those compounds that are COPECs for all receptors and all concentrations.

Table 7-57
Hazard Quotients for Ingestion of Mammals, Plants and Surface Water
Red Fox
Off-Site Areas 2002 River Data
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Shrew (b) (mg/kg)	Area Use Factor (a)	Dietary Percentage of Shrew (a)(c)	Dose from Shrew (mg/kg/day)	Concentration of Contaminant in Prairie Vole (b) (mg/kg)	Dietary Percentage of Prairie Vole (a)(c)	Dose from Prairie Vole (mg/kg/day)	Concentration of Contaminant in Plants (mg/kg)	Dietary Percentage of Plants (a)	Dose from Plants (mg/kg/day)
SVOCs															
1,2,4-Trichlorobenzene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
1,2-Dichlorobenzene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
1,3-Dichlorobenzene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
1,4-Dichlorobenzene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2,2'-Oxybis(1-Chloropropane)	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2,4,5-Trichlorophenol	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2,4,6-Trichlorophenol	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2,4-Dichlorophenol	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2,4-Dinitrophenol	***9.9E-01***	0.0126	1.0	3.0E-03	0.58	***2.6E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.2E-02	***2.6E+00***	0.104	3.7E-02
2,4-Dinitrotoluene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***7.4E-07***	0.344	3.6E-08	***5.0E-01***	0.104	7.2E-03
2,6-Dinitrotoluene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.7E-07***	0.344	2.8E-08	***5.0E-01***	0.104	7.2E-03
2-Chloronaphthalene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2-Chlorophenol	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2-Methylnaphthalene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2-Methylphenol (o-Cresol)	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2-Nitroaniline	***9.9E-01***	0.0126	1.0	3.0E-03	0.58	***2.6E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.2E-02	***2.6E+00***	0.104	3.7E-02
2-Nitrophenol	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
3,3'-Dichlorobenzidine	***3.8E-01***	0.0126	1.0	1.2E-03	0.58	***1.0E+00***	1.0	0.344	5.0E-02	***1.0E-01***	0.344	4.9E-03	***1.0E+00***	0.104	1.5E-02
3/4-Methylphenol (m&p-Cresol)	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
3-Nitroaniline	***9.9E-01***	0.0126	1.0	3.0E-03	0.58	***2.6E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.2E-02	***2.6E+00***	0.104	3.7E-02
4,6-Dinitro-2-methylphenol	***9.9E-01***	0.0126	1.0	3.0E-03	0.58	***2.6E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.2E-02	***2.6E+00***	0.104	3.7E-02
4-Bromophenyl Phenyl Ether	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
4-Chloro-3-methylphenol	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
4-Chloroaniline	***3.8E-01***	0.0126	1.0	1.2E-03	0.58	***1.0E+00***	1.0	0.344	5.0E-02	***1.0E-01***	0.344	4.9E-03	***1.0E+00***	0.104	1.5E-02
4-Chlorophenyl Phenyl Ether	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
4-Nitroaniline	***9.9E-01***	0.0126	1.0	3.0E-03	0.58	***2.6E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.2E-02	***2.6E+00***	0.104	3.7E-02
4-Nitrophenol	***9.9E-01***	0.0126	1.0	3.0E-03	0.58	***2.6E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.2E-02	***2.6E+00***	0.104	3.7E-02
Acenaphthene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Acenaphthylene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Anthracene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Benzo(a)anthracene	7.0E-02	0.0126	1.0	2.1E-04	0.58	5.1E-01	1.0	0.344	2.4E-02	***3.6E-03***	0.344	1.7E-04	***5.0E-01***	0.104	7.2E-03
Benzo(a)pyrene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***1.0E-02***	0.344	4.8E-04	***5.0E-01***	0.104	7.2E-03
Benzo(b)fluoranthene	1.5E-01	0.0126	1.0	4.6E-04	0.58	5.1E-01	1.0	0.344	2.5E-02	***1.2E-02***	0.344	5.7E-04	***5.0E-01***	0.104	7.2E-03
Benzo(g,h,i)perylene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Benzo(k)fluoranthene	7.3E-02	0.0126	1.0	2.2E-04	0.58	5.1E-01	1.0	0.344	2.4E-02	***1.2E-02***	0.344	5.7E-04	***5.0E-01***	0.104	7.2E-03
bis(2-Chloroethoxy)methane	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
bis(2-Chloroethyl)ether	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
bis(2-Ethylhexyl)phthalate	2.2E-01	0.0126	1.0	6.7E-04	0.58	5.2E-01	1.0	0.344	2.5E-02	***1.2E-03***	0.344	5.8E-05	***5.0E-01***	0.104	7.2E-03
Butyl Benzyl Phthalate	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Carbazole	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Chrysene	7.7E-02	0.0126	1.0	2.3E-04	0.58	5.1E-01	1.0	0.344	2.4E-02	***4.1E-03***	0.344	2.0E-04	***5.0E-01***	0.104	7.2E-03
Dibenzo(a,h)anthracene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***2.6E-02***	0.344	1.3E-03	***5.0E-01***	0.104	7.2E-03
Dibenzofuran	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Diethyl Phthalate	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Dimethyl Phthalate	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Di-n-butylphthalate	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	4.2E-01	1.0	0.344	2.0E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Di-n-octylphthalate	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***1.6E+01***	0.344	7.7E-01	***5.0E-01***	0.104	7.2E-03
Fluoranthene	1.2E-01	0.0126	1.0	3.7E-04	0.58	5.1E-01	1.0	0.344	2.5E-02	5.0E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Fluorene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Hexachlorobenzene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***2.4E-03***	0.344	1.1E-04	***5.0E-01***	0.104	7.2E-03
Hexachlorobutadiene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***4.0E-04***	0.344	1.9E-05	***5.0E-01***	0.104	7.2E-03
Hexachlorocyclopentadiene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***6.0E-04***	0.344	2.9E-05	***5.0E-01***	0.104	7.2E-03
Hexachloroethane	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Indeno(1,2,3-cd)pyrene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***6.1E-02***	0.344	3.0E-03	***5.0E-01***	0.104	7.2E-03
Isophorone	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Naphthalene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Nitrobenzene	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.1E-07***	0.344	2.5E-08	***5.0E-01***	0.104	7.2E-03
N-Nitroso-di-n-propylamine	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
N-Nitrosodiphenylamine	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Pentachlorophenol	4.9E-03	0.0126	1.0	1.5E-05	0.58	2.1E-02	1.0	0.344	1.0E-03	***1.6E-03***	0.344	7.6E-05	***8.7E-01***	0.104	1.3E-02
Phenanthrene	7.7E-02	0.0126	1.0	2.3E-04	0.58	5.1E-01	1.0	0.344	2.4E-02	5.0E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Phenol	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Pyrene	1.2E-01	0.0126	1.0	3.8E-04	0.58	5.1E-01	1.0	0.344	2.5E-02	5.0E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - Values for the shrew were obtained by multiplying the mean off-site average daily dose (ADD) concentrations for the shrew by a factor of 1.0 to account for bioaccumulation but not biomagnification.
Values for the vole were obtained by multiplying the mean off-site plant concentrations by their plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). If a BCF was not available for the compound, then the vole ADD was used as described for the shrew. See Table III-B1.
(c) - The dietary percentage of the shrew and vole were calculated by taking the dietary percentage of mammals for the fox (0.688) and dividing it by two. This assumes the fox will eat an equal amount of shrews and voles.
(d) - It was decided to adjust the dietary percentages of the pond water and river water to 0.0% and 100%, respectively, for the fox off-site modeling. This was done because the pond is considered an on-site hazard.
(e) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values. (For the concentrations within the shrew and vole, the modeled values based on non-detects from all matricies are italicized)
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-57
Hazard Quotients for Ingestion of Mammals, Plants and Surface Water
Red Fox
Off-Site Areas 2002 River Data
Sauget, IL

Analyte	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Water (d)	Dose from Pond Surface Water (mg/kg/day)	Concentration of Contaminant in 2002 River Surface Water (Plot 1 A-Line) (mg/L)	Dietary Percentage of River Water (d)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (e)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
SVOCs															
1,2,4-Trichlorobenzene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	1.3E+01	4.6E+01	2.8E-03	7.7E-04
1,2-Dichlorobenzene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	7.4E+01	1.0E+03	4.8E-04	3.4E-05
1,3-Dichlorobenzene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	7.4E+01	1.0E+03	4.8E-04	3.4E-05
1,4-Dichlorobenzene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	7.4E+01	1.3E+02	4.8E-04	2.8E-04
2,2'-Oxybis(1-Chloropropane)	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	2.7E+01	1.5E+02	1.3E-03	2.4E-04
2,4,5-Trichlorophenol	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	8.6E+00	2.6E+01	4.1E-03	1.4E-03
2,4,6-Trichlorophenol	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	4.3E+02	2.6E+01	8.3E-05	1.4E-03
2,4-Dichlorophenol	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	2.6E-01	2.6E+00	1.4E-01	1.4E-02
2,4-Dinitrophenol	0.38	***2.5E-02***	1.0	0.0	0.0E+00	***2.5E-02***	1.0	2.3E-03	4.13	1.0	1.8E-01	1.2E-03	1.2E-02	1.5E+02	1.5E+01
2,4-Dinitrotoluene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.3E-02	2.1E-01	1.6E+00	1.6E-01	2.1E-02
2,6-Dinitrotoluene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.3E-02	6.0E-01	6.0E+00	5.5E-02	5.5E-03
2-Chloronaphthalene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	1.9E+01	4.4E+01	1.9E-03	8.0E-04
2-Chlorophenol	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	4.3E+01	4.3E+00	8.3E-04	8.3E-03
2-Methylnaphthalene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	2.1E+03	2.1E+04	1.7E-05	1.7E-06
2-Methylphenol (o-Cresol)	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	2.0E+02	2.0E+03	1.8E-04	1.8E-05
2-Nitroaniline	0.38	***2.5E-02***	1.0	0.0	0.0E+00	***2.5E-02***	1.0	2.3E-03	4.13	1.0	1.8E-01	3.6E+00	3.6E+01	5.0E-02	5.0E-03
2-Nitrophenol	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	2.1E+00	6.0E+00	1.7E-02	5.9E-03
3,3'-Dichlorobenzidine	0.38	***1.0E-02***	1.0	0.0	0.0E+00	***1.0E-02***	1.0	9.2E-04	4.13	1.0	7.1E-02	1.1E+01	3.8E+02	6.4E-03	1.9E-04
3/4-Methylphenol (m&p-Cresol)	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	2.0E+02	2.0E+03	1.8E-04	1.8E-05
3-Nitroaniline	0.38	***2.5E-02***	1.0	0.0	0.0E+00	***2.5E-02***	1.0	2.3E-03	4.13	1.0	1.8E-01	3.6E+00	3.6E+01	5.0E-02	5.0E-03
4,6-Dinitro-2-methylphenol	0.38	***2.5E-02***	1.0	0.0	0.0E+00	***2.5E-02***	1.0	2.3E-03	4.13	1.0	1.8E-01	2.1E-01	3.9E+00	8.4E-01	4.6E-02
4-Bromophenyl Phenyl Ether	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	8.6E-01	6.9E+00	4.1E-02	5.2E-03
4-Chloro-3-methylphenol	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	9.6E+01	9.6E+02	3.7E-04	3.7E-05
4-Chloroaniline	0.38	***1.0E-02***	1.0	0.0	0.0E+00	***1.0E-02***	1.0	9.2E-04	4.13	1.0	7.1E-02	1.1E+00	1.1E+01	6.6E-02	6.6E-03
4-Chlorophenyl Phenyl Ether	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	8.6E-01	6.9E+00	4.1E-02	5.2E-03
4-Nitroaniline	0.38	***2.5E-02***	1.0	0.0	0.0E+00	***2.5E-02***	1.0	2.3E-03	4.13	1.0	1.8E-01	3.6E+00	3.6E+01	5.0E-02	5.0E-03
4-Nitrophenol	0.38	***2.5E-02***	1.0	0.0	0.0E+00	***2.5E-02***	1.0	2.3E-03	4.13	1.0	1.8E-01	2.1E+00	6.0E+00	8.4E-02	3.0E-02
Acenaphthene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	1.3E+01	2.6E+01	2.7E-03	1.4E-03
Acenaphthylene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	1.3E+01	2.6E+01	2.7E-03	1.4E-03
Anthracene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	7.4E+01	7.4E+02	4.8E-04	4.8E-05
Benzo(a)anthracene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.2E-02	7.4E-01	7.4E+00	4.4E-02	4.4E-03
Benzo(a)pyrene	0.38	4.6E-03	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.5E-02	4.5E-03
Benzo(b)fluoranthene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.3E-02	7.4E-01	7.4E+00	4.5E-02	4.5E-03
Benzo(g,h,i)perylene	0.38	4.6E-03	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	7.4E-01	7.4E+00	4.8E-02	4.8E-03
Benzo(k)fluoranthene	0.38	5.2E-03	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.3E-02	7.4E-01	7.4E+00	4.4E-02	4.4E-03
bis(2-Chloroethoxy)methane	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	2.7E+01	1.5E+02	1.3E-03	2.4E-04
bis(2-Chloroethyl)ether	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	2.7E+01	1.5E+02	1.3E-03	2.4E-04
bis(2-Ethylhexyl)phthalate	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.3E-02	2.6E+02	2.6E+03	1.3E-04	1.3E-05
Butyl Benzyl Phthalate	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	1.4E+01	4.0E+01	2.6E-03	8.8E-04
Carbazole	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	2.2E+00	2.2E+01	1.6E-02	1.6E-03
Chrysene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.2E-02	7.4E-01	7.4E+00	4.4E-02	4.4E-03
Dibenzo(a,h)anthracene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.6E-02	4.6E-03
Dibenzofuran	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	1.1E-02	1.1E-01	3.1E+00	3.1E-01
Diethyl Phthalate	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	1.1E+03	1.1E+04	3.2E-05	3.2E-06
Dimethyl Phthalate	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	3.4E+03	3.4E+04	1.0E-05	1.0E-06
Di-n-butylphthalate	0.38	4.6E-03	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.1E-02	3.1E+03	1.0E+04	1.0E-05	3.0E-06
Di-n-octylphthalate	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	8.0E-01	4.1E+02	1.4E+03	2.0E-03	5.9E-04
Fluoranthene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	9.3E+00	1.9E+01	3.8E-03	1.9E-03
Fluorene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	9.3E+00	1.9E+01	3.8E-03	1.9E-03
Hexachlorobenzene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.3E-02	6.9E-02	2.5E-01	4.8E-01	1.3E-01
Hexachlorobutadiene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.3E-02	1.7E-01	1.7E-01	1.9E-01	1.9E-01
Hexachlorocyclopentadiene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.3E-02	5.1E-01	9.4E-01	6.4E-02	3.5E-02
Hexachloroethane	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	8.6E-02	1.3E+00	4.1E-01	2.8E-02
Indeno(1,2,3-cd)pyrene	0.38	4.8E-03	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.6E-02	7.4E-01	7.4E+00	4.9E-02	4.9E-03
Isophorone	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	1.6E+01	1.5E+02	2.2E-03	2.3E-04
Naphthalene	0.38	4.9E-03	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	6.1E+00	1.2E+01	5.8E-03	2.9E-03
Nitrobenzene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.3E-02	3.4E-02	3.4E-01	9.7E-01	9.7E-02
N-Nitroso-di-n-propylamine	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	7.4E-03	7.4E-02	4.8E+00	4.8E-01
N-Nitrosodiphenylamine	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	1.7E+02	4.3E+01	2.1E-04	8.3E-04
Pentachlorophenol	0.38	***5.0E-04***	1.0	0.0	0.0E+00	***5.0E-04***	1.0	4.6E-05	4.13	1.0	1.4E-02	1.5E-01	1.5E+00	9.2E-02	9.2E-03
Phenanthrene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	1.3E+01	2.6E+01	2.7E-03	1.3E-03
Phenol	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	5.1E+01	1.0E+02	6.9E-04	3.4E-04
Pyrene	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	5.6E+00	9.3E+00	6.3E-03	3.8E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - Values for the shrew were obtained by multiplying the mean off-site average daily dose (ADD) concentrations for the shrew by a factor of 1.0 to account for bioaccumulation but not biomagnification.
Values for the vole were obtained by multiplying the mean off-site plant concentrations by their plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). If a BCF was not available for the compound, then the vole ADD was used as described for the shrew. See Table III-B1.
(c) - The dietary percentage of the shrew and vole were calculated by taking the dietary percentage of mammals for the fox (0.688) and dividing it by two. This assumes the fox will eat an equal amount of shrews and voles.
(d) - It was decided to adjust the dietary percentages of the pond water and river water to 0.0% and 100%, respectively, for the fox off-site modeling. This was done because the pond is considered an on-site hazard.
(e) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values. (For the concentrations within the shrew and vole, the modeled values based on non-detects from all matricies are italicized)
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-57
Hazard Quotients for Ingestion of Mammals, Plants and Surface Water
Red Fox
Off-Site Areas 2002 River Data
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Shrew (b) (mg/kg)	Area Use Factor (a)	Dietary Percentage of Shrew (a)(c)	Dose from Shrew (mg/kg/day)	Concentration of Contaminant in Prairie Vole (b) (mg/kg)	Dietary Percentage of Prairie Vole (a)(c)	Dose from Prairie Vole (mg/kg/day)	Concentration of Contaminant in Plants (mg/kg)	Dietary Percentage of Plants (a)	Dose from Plants (mg/kg/day)
Pesticides															
4,4'-DDD	3.2E-03	0.0126	1.0	9.7E-06	0.58	9.3E-03	1.0	0.344	4.5E-04	5.0E-04	0.344	2.4E-05	***5.0E-03***	0.104	7.2E-05
4,4'-DDE	7.6E-03	0.0126	1.0	2.3E-05	0.58	8.2E-03	1.0	0.344	4.0E-04	***1.3E-04***	0.344	6.5E-06	***5.0E-03***	0.104	7.2E-05
4,4'-DDT	2.2E-02	0.0126	1.0	6.8E-05	0.58	1.7E-02	1.0	0.344	8.2E-04	3.6E-04	0.344	1.7E-05	3.0E-03	0.104	4.3E-05
Aldrin	***9.9E-04***	0.0126	1.0	3.0E-06	0.58	4.5E-03	1.0	0.344	2.2E-04	***2.6E-04***	0.344	1.2E-05	***2.6E-03***	0.104	3.7E-05
alpha-BHC	***9.9E-04***	0.0126	1.0	3.0E-06	0.58	***4.6E-03***	1.0	0.344	2.2E-04	***2.6E-04***	0.344	1.2E-05	***2.6E-03***	0.104	3.7E-05
alpha-Chlordane	***9.9E-04***	0.0126	1.0	3.0E-06	0.58	***4.6E-03***	1.0	0.344	2.2E-04	***2.6E-04***	0.344	1.2E-05	***2.6E-03***	0.104	3.7E-05
beta-BHC	***9.9E-04***	0.0126	1.0	3.0E-06	0.58	***4.6E-03***	1.0	0.344	2.2E-04	***2.6E-04***	0.344	1.2E-05	***2.6E-03***	0.104	3.7E-05
delta-BHC	***9.9E-04***	0.0126	1.0	3.0E-06	0.58	3.4E-03	1.0	0.344	1.6E-04	***2.6E-04***	0.344	1.2E-05	***2.6E-03***	0.104	3.7E-05
Dieldrin	4.6E-03	0.0126	1.0	1.4E-05	0.58	7.4E-03	1.0	0.344	3.6E-04	5.1E-04	0.344	2.4E-05	***5.0E-03***	0.104	7.2E-05
Endosulfan I	1.1E-03	0.0126	1.0	3.3E-06	0.58	3.5E-03	1.0	0.344	1.7E-04	2.6E-04	0.344	1.2E-05	***2.6E-03***	0.104	3.7E-05
Endosulfan II	1.6E-03	0.0126	1.0	4.9E-06	0.58	9.1E-03	1.0	0.344	4.4E-04	5.0E-04	0.344	2.4E-05	***5.0E-03***	0.104	7.2E-05
Endosulfan Sulfate	1.4E-03	0.0126	1.0	4.3E-06	0.58	9.1E-03	1.0	0.344	4.4E-04	5.0E-04	0.344	2.4E-05	***5.0E-03***	0.104	7.2E-05
Endrin	***1.9E-03***	0.0126	1.0	5.8E-06	0.58	***9.2E-03***	1.0	0.344	4.4E-04	***5.0E-04***	0.344	2.4E-05	***5.0E-03***	0.104	7.2E-05
Endrin Aldehyde	2.2E-03	0.0126	1.0	6.7E-06	0.58	7.1E-03	1.0	0.344	3.4E-04	5.0E-04	0.344	2.4E-05	***5.0E-03***	0.104	7.2E-05
Endrin Ketone	***1.9E-03***	0.0126	1.0	5.8E-06	0.58	9.0E-03	1.0	0.344	4.3E-04	***5.0E-04***	0.344	2.4E-05	***5.0E-03***	0.104	7.2E-05
gamma-BHC (Lindane)	***9.9E-04***	0.0126	1.0	3.0E-06	0.58	4.4E-03	1.0	0.344	2.1E-04	2.2E-04	0.344	1.1E-05	2.2E-03	0.104	3.2E-05
gamma-Chlordane	***9.9E-04***	0.0126	1.0	3.0E-06	0.58	2.3E-03	1.0	0.344	1.1E-04	***2.6E-04***	0.344	1.2E-05	***2.6E-03***	0.104	3.7E-05
Heptachlor	***9.9E-04***	0.0126	1.0	3.0E-06	0.58	4.4E-03	1.0	0.344	2.1E-04	3.5E-06	0.344	1.7E-07	2.2E-03	0.104	3.3E-05
Heptachlor Epoxide	1.3E-03	0.0126	1.0	4.0E-06	0.58	4.6E-03	1.0	0.344	2.2E-04	2.6E-04	0.344	1.2E-05	***2.6E-03***	0.104	3.7E-05
Methoxychlor	8.2E-03	0.0126	1.0	2.5E-05	0.58	3.5E-02	1.0	0.344	1.7E-03	2.6E-03	0.344	1.2E-04	***2.6E-02***	0.104	3.7E-04
Toxaphene	***9.9E-02***	0.0126	1.0	3.0E-04	0.58	***4.6E-01***	1.0	0.344	2.2E-02	***2.6E-02***	0.344	1.2E-03	***2.6E-01***	0.104	3.7E-03
Herbicides															
2,4-D	5.1E-03	0.0126	1.0	1.5E-05	0.58	3.5E-02	1.0	0.344	1.7E-03	4.5E-02	0.344	2.2E-03	4.5E-01	0.104	6.5E-03
2,4-DB	***4.8E-03***	0.0126	1.0	1.5E-05	0.58	1.8E-02	1.0	0.344	8.6E-04	5.7E-02	0.344	2.8E-03	5.7E-01	0.104	8.4E-03
2,4,5-T	***4.8E-03***	0.0126	1.0	1.5E-05	0.58	1.6E-02	1.0	0.344	7.9E-04	4.3E-02	0.344	2.1E-03	4.3E-01	0.104	6.3E-03
2,4,5-TP (Silvex)	***4.8E-03***	0.0126	1.0	1.5E-05	0.58	1.4E-02	1.0	0.344	6.8E-04	***4.3E-02***	0.344	2.0E-03	***4.3E-01***	0.104	6.2E-03
Dalapon	***1.2E+00***	0.0126	1.0	3.5E-03	0.58	***3.9E+00***	1.0	0.344	1.9E-01	***1.0E+01***	0.344	4.9E-01	***1.0E+02***	0.104	1.5E+00
Dicamba	***1.2E-02***	0.0126	1.0	3.5E-05	0.58	***3.9E-02***	1.0	0.344	1.9E-03	***1.0E-01***	0.344	4.9E-03	***1.0E+00***	0.104	1.5E-02
Dichlorprop	8.4E-02	0.0126	1.0	2.5E-04	0.58	2.0E-01	1.0	0.344	9.5E-03	5.1E-01	0.344	2.5E-02	***5.1E+00***	0.104	7.4E-02
Dinoseb	***1.9E-01***	0.0126	1.0	5.8E-04	0.58	***5.1E-01***	1.0	0.344	2.5E-02	***5.0E-02***	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
MCPA	***1.2E+00***	0.0126	1.0	3.5E-03	0.58	2.0E+01	1.0	0.344	9.5E-01	***1.0E+01***	0.344	4.9E-01	***1.0E+02***	0.104	1.5E+00
MCPP	2.8E+00	0.0126	1.0	8.4E-03	0.58	4.0E+00	1.0	0.344	1.9E-01	1.0E+01	0.344	4.9E-01	***1.0E+02***	0.104	1.5E+00
PCBs															
Total PCBs	1.1E-01	0.0126	1.0	3.3E-04	0.58	3.1E-02	1.0	0.344	1.5E-03	2.8E-03	0.344	1.4E-04	***2.5E-02***	0.104	3.6E-04
Dioxins/Furans (f)															
TEQ	1.3E-04	0.0126	1.0	4.1E-07	0.58	1.2E-05	1.0	0.344	6.0E-07	1.1E-08	0.344	5.4E-10	3.5E-07	0.104	5.1E-09
Metals															
Aluminum	6.7E+03	0.0126	1.0	2.0E+01	0.58	7.7E+02	1.0	0.344	3.7E+01	2.4E+01	0.344	1.2E+00	5.2E+01	0.104	7.6E-01
Antimony	1.3E+00	0.0126	1.0	4.1E-03	0.58	5.9E-01	1.0	0.344	2.9E-02	***6.0E-04***	0.344	2.9E-05	***1.0E+00***	0.104	1.5E-02
Arsenic	7.4E+00	0.0126	1.0	2.3E-02	0.58	3.0E+00	1.0	0.344	1.4E-01	***6.0E-04***	0.344	2.9E-05	***5.0E-01***	0.104	7.3E-03
Barium	1.8E+02	0.0126	1.0	5.6E-01	0.58	2.2E+01	1.0	0.344	1.1E+00	9.7E-04	0.344	4.7E-05	1.1E+01	0.104	1.6E-01
Beryllium	5.0E-01	0.0126	1.0	1.5E-03	0.58	1.5E-01	1.0	0.344	7.3E-03	***1.2E-04***	0.344	5.8E-06	***2.0E-01***	0.104	2.9E-03
Cadmium	2.0E+00	0.0126	1.0	6.1E-03	0.58	9.0E-01	1.0	0.344	4.3E-02	2.2E-05	0.344	1.1E-06	3.1E-01	0.104	4.5E-03
Chromium	1.2E+01	0.0126	1.0	3.5E-02	0.58	1.4E+00	1.0	0.344	6.9E-02	1.1E-03	0.344	5.2E-05	3.3E-01	0.104	4.8E-03
Cobalt	5.4E+00	0.0126	1.0	1.6E-02	0.58	1.1E+00	1.0	0.344	5.5E-02	6.6E-02	0.344	3.2E-03	***5.0E-01***	0.104	7.3E-03
Copper	5.9E+01	0.0126	1.0	1.8E-01	0.58	1.4E+01	1.0	0.344	6.9E-01	5.7E-01	0.344	2.7E-02	4.0E+00	0.104	5.8E-02
Lead	7.9E+01	0.0126	1.0	2.4E-01	0.58	1.0E+01	1.0	0.344	5.0E-01	1.7E-04	0.344	8.0E-06	9.3E-01	0.104	1.3E-02
Manganese	2.8E+02	0.0126	1.0	8.7E-01	0.58	3.8E+01	1.0	0.344	1.8E+00	2.0E+00	0.344	9.7E-02	1.2E+01	0.104	1.7E-01
Mercury	8.5E-02	0.0126	1.0	2.6E-04	0.58	6.0E-02	1.0	0.344	2.9E-03	1.9E-04	0.344	8.9E-06	4.0E-01	0.104	5.8E-03
Nickel	1.8E+01	0.0126	1.0	5.4E-02	0.58	2.8E+00	1.0	0.344	1.4E-01	***7.2E-03***	0.344	3.5E-04	***2.0E+00***	0.104	2.9E-02
Selenium	5.6E-01	0.0126	1.0	1.7E-03	0.58	3.8E-01	1.0	0.344	1.8E-02	***6.8E-04***	0.344	3.3E-05	***5.0E-01***	0.104	7.3E-03
Silver	5.7E-01	0.0126	1.0	1.7E-03	0.58	3.0E-01	1.0	0.344	1.5E-02	***9.0E-04***	0.344	4.3E-05	***5.0E-01***	0.104	7.3E-03
Thallium	***5.4E-01***	0.0126	1.0	1.6E-03	0.58	***3.3E-01***	1.0	0.344	1.6E-02	***1.2E-02***	0.344	5.8E-04	***5.0E-01***	0.104	7.3E-03
Vanadium	2.2E+01	0.0126	1.0	6.6E-02	0.58	2.6E+00	1.0	0.344	1.2E-01	1.1E-01	0.344	5.3E-03	4.9E-01	0.104	7.1E-03
Zinc	2.4E+02	0.0126	1.0	7.4E-01	0.58	5.2E+01	1.0	0.344	2.5E+00	2.0E-03	0.344	9.7E-05	3.7E+01	0.104	5.4E-01

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - Values for the shrew were obtained by multiplying the mean off-site average daily dose (ADD) concentrations for the shrew by a factor of 1.0 to account for bioaccumulation but not biomagnification.
Values for the vole were obtained by multiplying the mean off-site plant concentrations by their plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). If a BCF was not available for the compound, then the vole ADD was used as described for the shrew. See Table III-B1.
(c) - The dietary percentage of the shrew and vole were calculated by taking the dietary percentage of mammals for the fox (0.688) and dividing it by two. This assumes the fox will eat an equal amount of shrews and voles.
(d) - It was decided to adjust the dietary percentages of the pond water and river water to 0.0% and 100%, respectively, for the fox off-site modeling. This was done because the pond is considered an on-site hazard.
(e) - See Table III-C1.
(f) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values. (For the concentrations within the shrew and vole, the modeled values based on non-detects from all matricies are italicized)
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-57
Hazard Quotients for Ingestion of Mammals, Plants and Surface Water
Red Fox
Off-Site Areas 2002 River Data
Sauget, IL

Analyte	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Water (d)	Dose from Pond Surface Water (mg/kg/day)	Concentration of Contaminant in 2002 River Surface Water (Plot 1 A-Line) (mg/L)	Dietary Percentage of River Water (d)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (e)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	0.38	***5.0E-05***	1.0	0.0	0.0E+00	***5.0E-05***	1.0	4.6E-06	4.13	1.0	5.6E-04	1.6E+00	7.9E+00	3.5E-04	7.0E-05
4,4'-DDE	0.38	***5.0E-05***	1.0	0.0	0.0E+00	***5.0E-05***	1.0	4.6E-06	4.13	1.0	5.0E-04	1.6E+00	7.9E+00	3.2E-04	6.3E-05
4,4'-DDT	0.38	4.8E-05	1.0	0.0	0.0E+00	***5.0E-05***	1.0	4.6E-06	4.13	1.0	9.5E-04	1.6E+00	7.9E+00	6.0E-04	1.2E-04
Aldrin	0.38	2.3E-05	1.0	0.0	0.0E+00	***2.5E-05***	1.0	2.3E-06	4.13	1.0	2.7E-04	1.4E-01	7.0E-01	1.9E-03	3.9E-04
alpha-BHC	0.38	***2.5E-05***	1.0	0.0	0.0E+00	***2.5E-05***	1.0	2.3E-06	4.13	1.0	2.8E-04	1.1E-02	1.1E-01	2.5E-02	2.5E-03
alpha-Chlordane	0.38	***2.5E-05***	1.0	0.0	0.0E+00	***2.5E-05***	1.0	2.3E-06	4.13	1.0	2.8E-04	2.0E+00	3.9E+00	1.4E-04	7.1E-05
beta-BHC	0.38	2.3E-05	1.0	0.0	0.0E+00	***2.5E-05***	1.0	2.3E-06	4.13	1.0	2.8E-04	2.8E-01	1.4E+00	1.0E-03	2.0E-04
delta-BHC	0.38	***2.5E-05***	1.0	0.0	0.0E+00	***2.5E-05***	1.0	2.3E-06	4.13	1.0	2.2E-04	1.1E-02	1.1E-01	1.9E-02	1.9E-03
Dieldrin	0.38	4.1E-05	1.0	0.0	0.0E+00	***5.0E-05***	1.0	4.6E-06	4.13	1.0	4.7E-04	2.3E-02	2.3E-01	2.0E-02	2.0E-03
Endosulfan I	0.38	***2.5E-05***	1.0	0.0	0.0E+00	***2.5E-05***	1.0	2.3E-06	4.13	1.0	2.2E-04	4.9E-02	4.9E-01	4.6E-03	4.6E-04
Endosulfan II	0.38	***5.0E-05***	1.0	0.0	0.0E+00	***5.0E-05***	1.0	4.6E-06	4.13	1.0	5.5E-04	4.9E-02	4.9E-01	1.1E-02	1.1E-03
Endosulfan Sulfate	0.38	***5.0E-05***	1.0	0.0	0.0E+00	***5.0E-05***	1.0	4.6E-06	4.13	1.0	5.4E-04	4.9E-02	4.9E-01	1.1E-02	1.1E-03
Endrin	0.38	***5.0E-05***	1.0	0.0	0.0E+00	***5.0E-05***	1.0	4.6E-06	4.13	1.0	5.5E-04	7.8E-02	7.8E-01	7.0E-03	7.0E-04
Endrin Aldehyde	0.38	***5.0E-05***	1.0	0.0	0.0E+00	***5.0E-05***	1.0	4.6E-06	4.13	1.0	4.5E-04	7.8E-02	7.8E-01	5.7E-03	5.7E-04
Endrin Ketone	0.38	***5.0E-05***	1.0	0.0	0.0E+00	3.0E-05	1.0	2.7E-06	4.13	1.0	5.4E-04	7.8E-02	7.8E-01	6.9E-03	6.9E-04
gamma-BHC (Lindane)	0.38	***2.5E-05***	1.0	0.0	0.0E+00	***2.5E-05***	1.0	2.3E-06	4.13	1.0	2.6E-04	3.0E+00	3.0E+01	8.7E-05	8.7E-06
gamma-Chlordane	0.38	***2.5E-05***	1.0	0.0	0.0E+00	***2.5E-05***	1.0	2.3E-06	4.13	1.0	1.7E-04	2.0E+00	3.9E+00	8.5E-05	4.3E-05
Heptachlor	0.38	***2.5E-05***	1.0	0.0	0.0E+00	***2.5E-05***	1.0	2.3E-06	4.13	1.0	2.5E-04	1.1E-01	1.1E+00	2.2E-03	2.2E-04
Heptachlor Epoxide	0.38	***2.5E-05***	1.0	0.0	0.0E+00	***2.5E-05***	1.0	2.3E-06	4.13	1.0	2.8E-04	1.6E-03	1.1E-02	1.8E-01	2.4E-02
Methoxychlor	0.38	***2.5E-04***	1.0	0.0	0.0E+00	***2.5E-04***	1.0	2.3E-05	4.13	1.0	2.2E-03	7.1E+00	1.4E+01	3.1E-04	1.6E-04
Toxaphene	0.38	***2.5E-03***	1.0	0.0	0.0E+00	***2.5E-03***	1.0	2.3E-04	4.13	1.0	2.8E-02	8.1E+00	8.1E+01	3.4E-03	3.4E-04
Herbicides															
2,4-D	0.38	***2.5E-04***	1.0	0.0	0.0E+00	***2.5E-04***	1.0	2.3E-05	4.13	1.0	1.0E-02	6.0E-01	3.0E+00	1.7E-02	3.5E-03
2,4-DB	0.38	***2.5E-04***	1.0	0.0	0.0E+00	***2.5E-04***	1.0	2.3E-05	4.13	1.0	1.2E-02	9.8E-01	3.1E+00	1.2E-02	3.9E-03
2,4,5-T	0.38	***2.5E-04***	1.0	0.0	0.0E+00	***2.5E-04***	1.0	2.3E-05	4.13	1.0	9.2E-03	2.6E+00	8.6E+00	3.6E-03	1.1E-03
2,4,5-TP (Silvex)	0.38	***2.5E-04***	1.0	0.0	0.0E+00	***2.5E-04***	1.0	2.3E-05	4.13	1.0	9.0E-03	8.0E-01	2.7E+00	1.1E-02	3.4E-03
Dalapon	0.38	***6.0E-02***	1.0	0.0	0.0E+00	***6.0E-02***	1.0	5.5E-03	4.13	1.0	2.2E+00	7.2E+00	2.5E+01	3.0E-01	8.8E-02
Dicamba	0.38	***6.0E-04***	1.0	0.0	0.0E+00	***6.0E-04***	1.0	5.5E-05	4.13	1.0	2.2E-02	2.8E+00	9.2E+00	7.8E-03	2.4E-03
Dichlorprop	0.38	***3.0E-03***	1.0	0.0	0.0E+00	***3.0E-03***	1.0	2.8E-04	4.13	1.0	1.1E-01	1.5E-01	1.5E+00	7.4E-01	7.4E-02
Dinoseb	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	3.5E-02	8.6E-02	8.6E-01	4.1E-01	4.1E-02
MCPA	0.38	***6.0E-02***	1.0	0.0	0.0E+00	***6.0E-02***	1.0	5.5E-03	4.13	1.0	2.9E+00	1.6E-01	8.0E-01	1.8E+01	3.7E+00
MCPP	0.38	***6.0E-02***	1.0	0.0	0.0E+00	***6.0E-02***	1.0	5.5E-03	4.13	1.0	2.2E+00	2.6E-01	7.7E-01	8.5E+00	2.8E+00
PCBs															
Total PCBs	0.38	2.3E-04	1.0	0.0	0.0E+00	***2.5E-04***	1.0	2.3E-05	4.13	1.0	2.4E-03	8.6E-02	8.6E-01	2.7E-02	2.7E-03
Dioxins/Furans (f)															
TEQ	0.38	8.1E-09	1.0	0.0	0.0E+00	***2.1E-09***	1.0	2.0E-10	4.13	1.0	1.0E-06	8.6E-07	8.6E-06	1.2E+00	1.2E-01
Metals															
Aluminum	0.38	1.1E+00	1.0	0.0	0.0E+00	6.6E-01	1.0	6.1E-02	4.13	1.0	6.0E+01	1.4E+00	1.4E+01	4.2E+01	4.2E+00
Antimony	0.38	***8.3E-03***	1.0	0.0	0.0E+00	***1.0E-02***	1.0	9.2E-04	4.13	1.0	4.8E-02	9.3E-02	9.3E-01	5.2E-01	5.2E-02
Arsenic	0.38	5.1E-03	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	1.7E-01	6.7E-02	6.7E-01	2.6E+00	2.6E-01
Barium	0.38	1.4E-01	1.0	0.0	0.0E+00	5.8E-02	1.0	5.4E-03	4.13	1.0	1.8E+00	2.7E+00	1.0E+01	6.7E-01	1.7E-01
Beryllium	0.38	***2.0E-03***	1.0	0.0	0.0E+00	***2.0E-03***	1.0	1.8E-04	4.13	1.0	1.2E-02	5.7E-01	5.7E+00	2.1E-02	2.1E-03
Cadmium	0.38	2.3E-03	1.0	0.0	0.0E+00	***2.5E-03***	1.0	2.3E-04	4.13	1.0	5.4E-02	2.4E-01	2.4E+00	2.3E-01	2.3E-02
Chromium	0.38	5.1E-03	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	1.1E-01	2.8E+00	1.1E+01	3.9E-02	9.8E-03
Cobalt	0.38	5.5E-03	1.0	0.0	0.0E+00	3.7E-03	1.0	3.4E-04	4.13	1.0	8.2E-02	4.3E-02	4.3E-01	1.9E+00	1.9E-01
Copper	0.38	7.3E-03	1.0	0.0	0.0E+00	***1.0E-02***	1.0	9.2E-04	4.13	1.0	9.6E-01	1.1E+01	1.4E+01	8.9E-02	6.8E-02
Lead	0.38	4.0E-03	1.0	0.0	0.0E+00	***2.5E-03***	1.0	2.3E-04	4.13	1.0	7.5E-01	6.9E+00	6.9E+01	1.1E-01	1.1E-02
Manganese	0.38	1.1E-01	1.0	0.0	0.0E+00	8.1E-02	1.0	7.5E-03	4.13	1.0	3.0E+00	7.5E+01	2.4E+02	3.9E-02	1.2E-02
Mercury	0.38	9.7E-05	1.0	0.0	0.0E+00	***1.0E-04***	1.0	9.2E-06	4.13	1.0	8.9E-03	8.8E-03	1.5E-02	1.0E+00	6.1E-01
Nickel	0.38	1.4E-02	1.0	0.0	0.0E+00	***2.0E-02***	1.0	1.8E-03	4.13	1.0	2.2E-01	3.4E+01	6.9E+01	6.5E-03	3.2E-03
Selenium	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	2.8E-02	2.1E-01	3.4E-01	1.3E-01	8.1E-02
Silver	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	2.4E-02	1.3E-01	1.3E+00	1.8E-01	1.8E-02
Thallium	0.38	***5.0E-03***	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	2.6E-02	4.5E-03	4.5E-02	5.7E+00	5.7E-01
Vanadium	0.38	5.7E-03	1.0	0.0	0.0E+00	***5.0E-03***	1.0	4.6E-04	4.13	1.0	2.0E-01	3.5E-01	3.5E+00	5.8E-01	5.8E-02
Zinc	0.38	2.2E-02	1.0	0.0	0.0E+00	***1.0E-02***	1.0	9.2E-04	4.13	1.0	3.8E+00	1.1E+02	2.2E+02	3.5E-02	1.7E-02

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - Values for the shrew were obtained by multiplying the mean off-site average daily dose (ADD) concentrations for the shrew by a factor of 1.0 to account for bioaccumulation but not biomagnification.
Values for the vole were obtained by multiplying the mean off-site plant concentrations by their plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). If a BCF was not available for the compound, then the vole ADD was used as described for the shrew. See Table III-B1.
(c) - The dietary percentage of the shrew and vole were calculated by taking the dietary percentage of mammals for the fox (0.688) and dividing it by two. This assumes the fox will eat an equal amount of shrews and voles.
(d) - It was decided to adjust the dietary percentages of the pond water and river water to 0.0% and 100%, respectively, for the fox off-site modeling. This was done because the pond is considered an on-site hazard.
(e) - See Table III-C1.
(f) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values. (For the concentrations within the shrew and vole, the modeled values based on non-detects from all matricies are italicized)
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-58
Hazard Quotients for Ingestion of Mammals, Plants and Surface Water
Red Fox
Site-Wide 2002 River Data
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Shrew (b) (mg/kg)	Area Use Factor (a)	Dietary Percentage of Shrew (a)(c)	Dose from Shrew (mg/kg/day)	Concentration of Contaminant in Prairie Vole (b) (mg/kg)	Dietary Percentage of Prairie Vole (a)(c)	Dose from Prairie Vole (mg/kg/day)	Concentration of Contaminant in Plants (mg/kg)	Dietary Percentage of Plants (a)	Dose from Plants (mg/kg/day)
SVOCs															
1,2,4-Trichlorobenzene	1.0E+00	0.0126	1.0	3.1E-03	0.58	5.3E-01	1.0	0.344	2.6E-02	5.2E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
1,2-Dichlorobenzene	1.0E+00	0.0126	1.0	3.2E-03	0.58	5.3E-01	1.0	0.344	2.6E-02	5.3E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
1,3-Dichlorobenzene	4.1E-01	0.0126	1.0	1.2E-03	0.58	4.8E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
1,4-Dichlorobenzene	5.2E-01	0.0126	1.0	1.6E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2,2'-Oxybis(1-Chloropropane)	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2,4,5-Trichlorophenol	4.1E-01	0.0126	1.0	1.3E-03	0.58	4.9E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2,4,6-Trichlorophenol	5.4E-01	0.0126	1.0	1.7E-03	0.58	5.0E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2,4-Dichlorophenol	4.3E-01	0.0126	1.0	1.3E-03	0.58	4.9E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2,4-Dinitrophenol	***2.7E+00***	0.0126	1.0	8.3E-03	0.58	***2.5E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.3E-02	***2.6E+00***	0.104	3.7E-02
2,4-Dinitrotoluene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***7.4E-07***	0.344	3.6E-08	***5.0E-01***	0.104	7.2E-03
2,6-Dinitrotoluene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.7E-07***	0.344	2.8E-08	***5.0E-01***	0.104	7.2E-03
2-Chloronaphthalene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2-Chlorophenol	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2-Methylnaphthalene	5.7E-01	0.0126	1.0	1.7E-03	0.58	5.0E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2-Methylphenol (o-Cresol)	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2-Nitroaniline	2.0E+00	0.0126	1.0	6.0E-03	0.58	2.4E+00	1.0	0.344	1.2E-01	2.6E-01	0.344	1.3E-02	***2.6E+00***	0.104	3.7E-02
2-Nitrophenol	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
3,3'-Dichlorobenzidine	***1.0E+00***	0.0126	1.0	3.2E-03	0.58	***9.9E-01***	1.0	0.344	4.8E-02	***1.0E-01***	0.344	5.0E-03	***1.0E+00***	0.104	1.5E-02
3/4-Methylphenol (m&p-Cresol)	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
3-Nitroaniline	***2.7E+00***	0.0126	1.0	8.1E-03	0.58	***2.5E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.3E-02	***2.6E+00***	0.104	3.7E-02
4,6-Dinitro-2-methylphenol	***2.7E+00***	0.0126	1.0	8.1E-03	0.58	***2.5E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.3E-02	***2.6E+00***	0.104	3.7E-02
4-Bromophenyl Phenyl Ether	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
4-Chloro-3-methylphenol	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
4-Chloroaniline	1.3E+00	0.0126	1.0	3.8E-03	0.58	1.0E+00	1.0	0.344	4.8E-02	1.0E-01	0.344	5.0E-03	***1.0E+00***	0.104	1.5E-02
4-Chlorophenyl Phenyl Ether	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
4-Nitroaniline	3.0E+00	0.0126	1.0	9.0E-03	0.58	2.5E+00	1.0	0.344	1.2E-01	2.6E-01	0.344	1.3E-02	***2.6E+00***	0.104	3.7E-02
4-Nitrophenol	***2.7E+00***	0.0126	1.0	8.1E-03	0.58	***2.5E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.3E-02	***2.6E+00***	0.104	3.7E-02
Acenaphthene	3.6E-01	0.0126	1.0	1.1E-03	0.58	4.8E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Acenaphthylene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Anthracene	5.2E-01	0.0126	1.0	1.6E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Benzo(a)anthracene	6.7E-01	0.0126	1.0	2.0E-03	0.58	5.1E-01	1.0	0.344	2.4E-02	***3.6E-03***	0.344	1.7E-04	***5.0E-01***	0.104	7.2E-03
Benzo(a)pyrene	6.3E-01	0.0126	1.0	1.9E-03	0.58	5.0E-01	1.0	0.344	2.4E-02	***1.0E-02***	0.344	4.8E-04	***5.0E-01***	0.104	7.2E-03
Benzo(b)fluoranthene	6.8E-01	0.0126	1.0	2.1E-03	0.58	5.0E-01	1.0	0.344	2.4E-02	***1.2E-02***	0.344	5.7E-04	***5.0E-01***	0.104	7.2E-03
Benzo(g,h,i)perylene	5.3E-01	0.0126	1.0	1.6E-03	0.58	4.9E-01	1.0	0.344	2.3E-02	4.7E-02	0.344	2.3E-03	4.5E-01	0.104	6.6E-03
Benzo(k)fluoranthene	6.0E-01	0.0126	1.0	1.8E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	***1.2E-02***	0.344	5.7E-04	***5.0E-01***	0.104	7.2E-03
bis(2-Chloroethoxy)methane	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
bis(2-Chloroethyl)ether	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
bis(2-Ethylhexyl)phthalate	9.1E-01	0.0126	1.0	2.8E-03	0.58	5.2E-01	1.0	0.344	2.5E-02	1.2E-03	0.344	5.6E-05	4.8E-01	0.104	7.0E-03
Butyl Benzyl Phthalate	4.8E+00	0.0126	1.0	1.5E-02	0.58	8.3E-01	1.0	0.344	4.0E-02	6.3E-02	0.344	3.1E-03	***5.0E-01***	0.104	7.2E-03
Carbazole	4.8E-01	0.0126	1.0	1.5E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Chrysene	9.2E-01	0.0126	1.0	2.8E-03	0.58	5.1E-01	1.0	0.344	2.5E-02	***4.1E-03***	0.344	2.0E-04	***5.0E-01***	0.104	7.2E-03
Dibenzo(a,h)anthracene	4.1E-01	0.0126	1.0	1.2E-03	0.58	4.9E-01	1.0	0.344	2.3E-02	***2.6E-02***	0.344	1.3E-03	***5.0E-01***	0.104	7.2E-03
Dibenzofuran	5.0E-01	0.0126	1.0	1.5E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Diethyl Phthalate	5.1E-01	0.0126	1.0	1.6E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Dimethyl Phthalate	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Di-n-butylphthalate	4.9E-01	0.0126	1.0	1.5E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	4.1E-02	0.344	2.0E-03	3.9E-01	0.104	5.7E-03
Di-n-octylphthalate	4.1E-01	0.0126	1.0	1.3E-03	0.58	4.8E-01	1.0	0.344	2.3E-02	***1.6E+01***	0.344	7.7E-01	***5.0E-01***	0.104	7.2E-03
Fluoranthene	8.8E-01	0.0126	1.0	2.7E-03	0.58	5.2E-01	1.0	0.344	2.5E-02	5.2E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Fluorene	4.0E-01	0.0126	1.0	1.2E-03	0.58	4.8E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Hexachlorobenzene	5.1E-01	0.0126	1.0	1.5E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	***2.4E-03***	0.344	1.1E-04	***5.0E-01***	0.104	7.2E-03
Hexachlorobutadiene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***4.0E-04***	0.344	1.9E-05	***5.0E-01***	0.104	7.2E-03
Hexachlorocyclopentadiene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***6.0E-04***	0.344	2.9E-05	***5.0E-01***	0.104	7.2E-03
Hexachloroethane	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Indeno(1,2,3-cd)pyrene	4.1E-01	0.0126	1.0	1.2E-03	0.58	4.8E-01	1.0	0.344	2.3E-02	***6.1E-02***	0.344	3.0E-03	***5.0E-01***	0.104	7.2E-03
Isophorone	5.2E-01	0.0126	1.0	1.6E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Naphthalene	4.2E-01	0.0126	1.0	1.3E-03	0.58	4.9E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Nitrobenzene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-07***	0.344	2.5E-08	***5.0E-01***	0.104	7.2E-03
N-Nitroso-di-n-propylamine	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
N-Nitrosodiphenylamine	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Pentachlorophenol	1.7E+01	0.0126	1.0	5.3E-02	0.58	1.4E+00	1.0	0.344	6.7E-02	***5.7E-05***	0.344	2.7E-06	***3.1E-02***	0.104	4.6E-04
Phenanthrene	7.8E-01	0.0126	1.0	2.4E-03	0.58	5.1E-01	1.0	0.344	2.5E-02	5.2E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Phenol	5.2E-01	0.0126	1.0	1.6E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.0E-02	0.344	2.4E-03	4.8E-01	0.104	7.0E-03
Pyrene	1.3E+00	0.0126	1.0	3.9E-03	0.58	5.5E-01	1.0	0.344	2.7E-02	5.3E-02	0.344	2.6E-03	***5.0E-01***	0.104	7.2E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - Values for the shrew were obtained by multiplying the mean site-wide average daily dose (ADD) concentrations for the shrew by a factor of 1.0 to account for bioaccumulation but not biomagnification.
Values for the vole were obtained by multiplying the mean site-wide plant concentrations by their plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). If a BCF was not available for the compound, then the vole ADD was used as described for the shrew. See Table III-B1.
(c) - The dietary percentage of the shrew and vole were calculated by taking the dietary percentage of mammals for the fox (0.688) and dividing it by two. This assumes the fox will eat an equal amount of shrews and voles.
(d) - The dietary percentage of the pond water and river water were calculated by dividing the total length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond water ingestion = (1,375+2,770)/14956 = 0.28.
(e) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values. (For the concentrations within the shrew and vole, the modeled values based on non-detects from all matricies are italicized)
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-58
Hazard Quotients for Ingestion of Mammals, Plants and Surface Water
Red Fox
Site-Wide 2002 River Data
Sauget, IL

Analyte	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Water (d)	Dose from Pond Surface Water (mg/kg/day)	Concentration of Contaminant in 2002 River Surface Water (All nearshore sample locations except Plot 1) (mg/L)	Dietary Percentage of River Water (d)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (e)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
SVOCs															
1,2,4-Trichlorobenzene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.9E-02	1.3E+01	4.6E+01	3.1E-03	8.5E-04
1,2-Dichlorobenzene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	6.9E-03	0.72	4.6E-04	4.13	1.0	3.9E-02	7.4E+01	1.0E+03	5.3E-04	3.8E-05
1,3-Dichlorobenzene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	7.4E+01	1.0E+03	4.7E-04	3.4E-05
1,4-Dichlorobenzene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	4.9E-03	0.72	3.3E-04	4.13	1.0	3.5E-02	7.4E+01	1.3E+02	4.8E-04	2.8E-04
2,2'-Oxybis(1-Chloropropane)	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	2.7E+01	1.5E+02	1.3E-03	2.4E-04
2,4,5-Trichlorophenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	8.6E+00	2.6E+01	4.1E-03	1.4E-03
2,4,6-Trichlorophenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	5.7E-03	0.72	3.8E-04	4.13	1.0	3.6E-02	4.3E+02	2.6E+01	8.3E-05	1.4E-03
2,4-Dichlorophenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	7.6E-03	0.72	5.0E-04	4.13	1.0	3.5E-02	2.6E-01	2.6E+00	1.4E-01	1.4E-02
2,4-Dinitrophenol	0.38	***2.5E-02***	1.0	0.28	6.4E-04	***2.5E-02***	0.72	1.7E-03	4.13	1.0	1.8E-01	1.2E-03	1.2E-02	1.6E+02	1.6E+01
2,4-Dinitrotoluene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.3E-02	2.1E-01	1.6E+00	1.5E-01	2.1E-02
2,6-Dinitrotoluene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.3E-02	6.0E-01	6.0E+00	5.5E-02	5.5E-03
2-Chloronaphthalene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	1.9E+01	4.4E+01	1.9E-03	8.0E-04
2-Chlorophenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	5.7E-03	0.72	3.8E-04	4.13	1.0	3.5E-02	4.3E+01	4.3E+00	8.3E-04	8.3E-03
2-Methylnaphthalene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.6E-02	2.1E+03	2.1E+04	1.7E-05	1.7E-06
2-Methylphenol (o-Cresol)	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	2.0E+02	2.0E+03	1.8E-04	1.8E-05
2-Nitroaniline	0.38	***2.5E-02***	1.0	0.28	6.4E-04	***2.5E-02***	0.72	1.7E-03	4.13	1.0	1.8E-01	3.6E+00	3.6E+01	4.9E-02	4.9E-03
2-Nitrophenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	2.1E+00	6.0E+00	1.7E-02	5.9E-03
3,3'-Dichlorobenzidine	0.38	***1.0E-02***	1.0	0.28	2.6E-04	***1.0E-02***	0.72	6.6E-04	4.13	1.0	7.1E-02	1.1E+01	3.8E+02	6.4E-03	1.9E-04
3/4-Methylphenol (m&p-Cresol)	0.38	***5.0E-03***	1.0	0.28	1.3E-04	6.2E-03	0.72	4.1E-04	4.13	1.0	3.6E-02	2.0E+02	2.0E+03	1.8E-04	1.8E-05
3-Nitroaniline	0.38	***2.5E-02***	1.0	0.28	6.4E-04	***2.5E-02***	0.72	1.7E-03	4.13	1.0	1.8E-01	3.6E+00	3.6E+01	5.0E-02	5.0E-03
4,6-Dinitro-2-methylphenol	0.38	***2.5E-02***	1.0	0.28	6.4E-04	***2.5E-02***	0.72	1.7E-03	4.13	1.0	1.8E-01	2.1E-01	3.9E+00	8.4E-01	4.6E-02
4-Bromophenyl Phenyl Ether	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	8.6E-01	6.9E+00	4.1E-02	5.2E-03
4-Chloro-3-methylphenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	9.6E+01	9.6E+02	3.7E-04	3.7E-05
4-Chloroaniline	0.38	***1.0E-02***	1.0	0.28	2.6E-04	1.6E-02	0.72	1.1E-03	4.13	1.0	7.3E-02	1.1E+00	1.1E+01	6.8E-02	6.8E-03
4-Chlorophenyl Phenyl Ether	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	8.6E-01	6.9E+00	4.1E-02	5.2E-03
4-Nitroaniline	0.38	***2.5E-02***	1.0	0.28	6.4E-04	***2.5E-02***	0.72	1.7E-03	4.13	1.0	1.8E-01	3.6E+00	3.6E+01	5.1E-02	5.1E-03
4-Nitrophenol	0.38	***2.5E-02***	1.0	0.28	6.4E-04	***2.5E-02***	0.72	1.7E-03	4.13	1.0	1.8E-01	2.1E+00	6.0E+00	8.4E-02	3.0E-02
Acenaphthene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.4E-02	1.3E+01	2.6E+01	2.7E-03	1.3E-03
Acenaphthylene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	1.3E+01	2.6E+01	2.7E-03	1.4E-03
Anthracene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	7.4E+01	7.4E+02	4.8E-04	4.8E-05
Benzo(a)anthracene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.6E-02	4.6E-03
Benzo(a)pyrene	0.38	4.6E-03	1.0	0.28	1.2E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.6E-02	4.6E-03
Benzo(b)fluoranthene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.6E-02	4.6E-03
Benzo(g,h,i)perylene	0.38	4.6E-03	1.0	0.28	1.2E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.6E-02	4.6E-03
Benzo(k)fluoranthene	0.38	5.2E-03	1.0	0.28	1.4E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.6E-02	4.6E-03
bis(2-Chloroethoxy)methane	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	2.7E+01	1.5E+02	1.3E-03	2.4E-04
bis(2-Chloroethyl)ether	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	2.7E+01	1.5E+02	1.3E-03	2.4E-04
bis(2-Ethylhexyl)phthalate	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.6E-02	2.6E+02	2.6E+03	1.4E-04	1.4E-05
Butyl Benzyl Phthalate	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	6.5E-02	1.4E+01	4.0E+01	4.8E-03	1.6E-03
Carbazole	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	2.2E+00	2.2E+01	1.6E-02	1.6E-03
Chrysene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	7.4E-01	7.4E+00	4.8E-02	4.8E-03
Dibenzo(a,h)anthracene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.5E-02	4.5E-03
Dibenzofuran	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	1.1E-02	1.1E-01	3.1E+00	3.1E-01
Diethyl Phthalate	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	1.1E+03	1.1E+04	3.2E-05	3.2E-06
Dimethyl Phthalate	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	3.4E+03	3.4E+04	1.0E-05	1.0E-06
Di-n-butylphthalate	0.38	4.6E-03	1.0	0.28	1.2E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.3E-02	3.1E+03	1.0E+04	1.1E-05	3.2E-06
Di-n-octylphthalate	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	8.0E-01	4.1E+02	1.4E+03	2.0E-03	5.9E-04
Fluoranthene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.8E-02	9.3E+00	1.9E+01	4.1E-03	2.1E-03
Fluorene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	9.3E+00	1.9E+01	3.7E-03	1.9E-03
Hexachlorobenzene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.3E-02	6.9E-02	2.5E-01	4.8E-01	1.3E-01
Hexachlorobutadiene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.3E-02	1.7E-01	1.7E-01	1.9E-01	1.9E-01
Hexachlorocyclopentadiene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.3E-02	5.1E-01	9.4E-01	6.4E-02	3.5E-02
Hexachloroethane	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	8.6E-02	1.3E+00	4.1E-01	2.8E-02
Indeno(1,2,3-cd)pyrene	0.38	4.8E-03	1.0	0.28	1.2E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	7.4E-01	7.4E+00	4.8E-02	4.8E-03
Isophorone	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.6E-02	1.6E+01	1.5E+02	2.2E-03	2.3E-04
Naphthalene	0.38	4.9E-03	1.0	0.28	1.3E-04	5.9E-03	0.72	3.9E-04	4.13	1.0	3.5E-02	6.1E+00	1.2E+01	5.7E-03	2.9E-03
Nitrobenzene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	4.9E-03	0.72	3.2E-04	4.13	1.0	3.3E-02	3.4E-02	3.4E-01	9.7E-01	9.7E-02
N-Nitroso-di-n-propylamine	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	7.4E-03	7.4E-02	4.8E+00	4.8E-01
N-Nitrosodiphenylamine	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	1.7E+02	4.3E+01	2.1E-04	8.3E-04
Pentachlorophenol	0.38	***5.0E-04***	1.0	0.28	1.3E-05	5.8E-04	0.72	3.8E-05	4.13	1.0	1.2E-01	1.5E-01	1.5E+00	8.0E-01	8.0E-02
Phenanthrene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.7E-02	1.3E+01	2.6E+01	2.9E-03	1.4E-03
Phenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	5.8E-03	0.72	3.9E-04	4.13	1.0	3.5E-02	5.1E+01	1.0E+02	6.9E-04	3.4E-04
Pyrene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	4.1E-02	5.6E+00	9.3E+00	7.3E-03	4.4E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - Values for the shrew were obtained by multiplying the mean site-wide average daily dose (ADD) concentrations for the shrew by a factor of 1.0 to account for bioaccumulation but not biomagnification.
Values for the vole were obtained by multiplying the mean site-wide plant concentrations by their plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). If a BCF was not available for the compound, then the vole ADD was used as described for the shrew. See Table III-B1.
(c) - The dietary percentage of the shrew and vole were calculated by taking the dietary percentage of mammals for the fox (0.688) and dividing it by two. This assumes the fox will eat an equal amount of shrews and voles.
(d) - The dietary percentage of the pond water and river water were calculated by dividing the total length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond water ingestion = (1,375+2,770)/14956 = 0.28.
(e) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values. (For the concentrations within the shrew and vole, the modeled values based on non-detects from all matricies are italicized)
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-58
Hazard Quotients for Ingestion of Mammals, Plants and Surface Water
Red Fox
Site-Wide 2002 River Data
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Shrew (b) (mg/kg)	Area Use Factor (a)	Dietary Percentage of Shrew (a)(c)	Dose from Shrew (mg/kg/day)	Concentration of Contaminant in Prairie Vole (b) (mg/kg)	Dietary Percentage of Prairie Vole (a)(c)	Dose from Prairie Vole (mg/kg/day)	Concentration of Contaminant in Plants (mg/kg)	Dietary Percentage of Plants (a)	Dose from Plants (mg/kg/day)
Pesticides															
4,4'-DDD	6.2E-02	0.0126	1.0	1.9E-04	0.58	1.5E-02	1.0	0.344	7.2E-04	6.7E-04	0.344	3.2E-05	4.9E-03	0.104	7.1E-05
4,4'-DDE	1.4E-01	0.0126	1.0	4.2E-04	0.58	2.0E-02	1.0	0.344	9.7E-04	1.4E-04	0.344	6.6E-06	5.0E-03	0.104	7.3E-05
4,4'-DDT	7.3E-01	0.0126	1.0	2.2E-03	0.58	1.3E-01	1.0	0.344	6.2E-03	2.5E-03	0.344	1.2E-04	4.3E-03	0.104	6.2E-05
Aldrin	3.1E-02	0.0126	1.0	9.5E-05	0.58	6.4E-03	1.0	0.344	3.1E-04	3.3E-04	0.344	1.6E-05	2.4E-03	0.104	3.5E-05
alpha-BHC	4.0E-02	0.0126	1.0	1.2E-04	0.58	7.1E-03	1.0	0.344	3.4E-04	3.5E-04	0.344	1.7E-05	2.3E-03	0.104	3.3E-05
alpha-Chlordane	3.3E-02	0.0126	1.0	1.0E-04	0.58	7.4E-03	1.0	0.344	3.5E-04	3.5E-04	0.344	1.7E-05	2.6E-03	0.104	3.7E-05
beta-BHC	7.3E-01	0.0126	1.0	2.2E-03	0.58	6.2E-02	1.0	0.344	3.0E-03	2.4E-03	0.344	1.2E-04	3.3E-03	0.104	4.8E-05
delta-BHC	2.7E-02	0.0126	1.0	8.2E-05	0.58	6.5E-03	1.0	0.344	3.1E-04	3.2E-04	0.344	1.5E-05	2.4E-03	0.104	3.5E-05
Dieldrin	9.9E-02	0.0126	1.0	3.0E-04	0.58	4.2E-02	1.0	0.344	2.0E-03	7.1E-04	0.344	3.4E-05	4.3E-03	0.104	6.2E-05
Endosulfan I	***3.1E-02***	0.0126	1.0	9.5E-05	0.58	6.4E-03	1.0	0.344	3.1E-04	***3.5E-04***	0.344	1.7E-05	***2.6E-03***	0.104	3.9E-05
Endosulfan II	1.6E-01	0.0126	1.0	4.9E-04	0.58	2.1E-02	1.0	0.344	1.0E-03	9.1E-04	0.344	4.4E-05	4.4E-03	0.104	6.4E-05
Endosulfan Sulfate	6.5E-02	0.0126	1.0	2.0E-04	0.58	1.2E-02	1.0	0.344	5.9E-04	6.8E-04	0.344	3.3E-05	4.9E-03	0.104	7.1E-05
Endrin	2.9E-01	0.0126	1.0	9.0E-04	0.58	3.2E-02	1.0	0.344	1.5E-03	1.3E-03	0.344	6.4E-05	4.9E-03	0.104	7.1E-05
Endrin Aldehyde	6.5E-02	0.0126	1.0	2.0E-04	0.58	1.3E-02	1.0	0.344	6.3E-04	7.8E-04	0.344	3.7E-05	5.9E-03	0.104	8.6E-05
Endrin Ketone	6.5E-02	0.0126	1.0	2.0E-04	0.58	1.3E-02	1.0	0.344	6.3E-04	6.8E-04	0.344	3.3E-05	4.9E-03	0.104	7.2E-05
gamma-BHC (Lindane)	2.2E-01	0.0126	1.0	6.6E-04	0.58	2.1E-02	1.0	0.344	1.0E-03	8.6E-04	0.344	4.2E-05	2.4E-03	0.104	3.5E-05
gamma-Chlordane	1.1E-01	0.0126	1.0	3.4E-04	0.58	1.2E-02	1.0	0.344	6.0E-04	5.8E-04	0.344	2.8E-05	2.6E-03	0.104	3.7E-05
Heptachlor	4.8E-02	0.0126	1.0	1.5E-04	0.58	7.5E-03	1.0	0.344	3.6E-04	4.0E-06	0.344	1.9E-07	2.6E-03	0.104	3.8E-05
Heptachlor Epoxide	3.5E-02	0.0126	1.0	1.1E-04	0.58	6.8E-03	1.0	0.344	3.3E-04	3.6E-04	0.344	1.7E-05	2.6E-03	0.104	3.8E-05
Methoxychlor	3.2E-01	0.0126	1.0	9.8E-04	0.58	5.4E-02	1.0	0.344	2.6E-03	4.0E-03	0.344	1.9E-04	3.1E-02	0.104	4.5E-04
Toxaphene	***3.1E+00***	0.0126	1.0	9.5E-03	0.58	***6.6E-01***	1.0	0.344	3.2E-02	***3.5E-02***	0.344	1.7E-03	***2.6E-01***	0.104	3.9E-03
Herbicides															
2,4-D	3.0E-01	0.0126	1.0	9.0E-04	0.58	7.7E-02	1.0	0.344	3.7E-03	5.7E-03	0.344	2.8E-04	4.9E-02	0.104	7.1E-04
2,4-DB	2.4E-01	0.0126	1.0	7.3E-04	0.58	3.5E-02	1.0	0.344	1.7E-03	1.3E-02	0.344	6.0E-04	1.2E-01	0.104	1.7E-03
2,4,5-T	5.6E-01	0.0126	1.0	1.7E-03	0.58	5.8E-02	1.0	0.344	2.8E-03	5.2E-03	0.344	2.5E-04	3.6E-02	0.104	5.3E-04
2,4,5-TP (Silvex)	2.4E-01	0.0126	1.0	7.3E-04	0.58	3.3E-02	1.0	0.344	1.6E-03	2.6E-03	0.344	1.3E-04	1.9E-02	0.104	2.8E-04
Dalapon	***1.1E+01***	0.0126	1.0	3.3E-02	0.58	***4.4E+00***	1.0	0.344	2.1E-01	***4.0E-01***	0.344	1.9E-02	***3.7E+00***	0.104	5.4E-02
Dicamba	2.5E-01	0.0126	1.0	7.5E-04	0.58	5.5E-02	1.0	0.344	2.6E-03	4.4E-03	0.344	2.1E-04	***3.7E-02***	0.104	5.4E-04
Dichlorprop	2.8E+00	0.0126	1.0	8.6E-03	0.58	4.0E-01	1.0	0.344	1.9E-02	2.7E-02	0.344	1.3E-03	1.9E-01	0.104	2.7E-03
Dinoseb	4.2E-01	0.0126	1.0	1.3E-03	0.58	4.9E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
MCPA	5.6E+01	0.0126	1.0	1.7E-01	0.58	2.2E+01	1.0	0.344	1.1E+00	6.7E-01	0.344	3.2E-02	5.1E+00	0.104	7.5E-02
MCPP	6.0E+01	0.0126	1.0	1.8E-01	0.58	8.3E+00	1.0	0.344	4.0E-01	6.3E-01	0.344	3.0E-02	4.6E+00	0.104	6.7E-02
PCBs															
Total PCBs	5.0E+01	0.0126	1.0	1.5E-01	0.58	5.5E+00	1.0	0.344	2.7E-01	1.5E-01	0.344	7.0E-03	***2.5E-02***	0.104	3.6E-04
Dioxins/Furans (f)															
TEQ	2.2E-03	0.0126	1.0	6.9E-06	0.58	2.4E-04	1.0	0.344	1.1E-05	1.9E-08	0.344	8.9E-10	5.7E-07	0.104	8.3E-09
Metals															
Aluminum	8.1E+03	0.0126	1.0	2.5E+01	0.58	9.1E+02	1.0	0.344	4.4E+01	2.6E+01	0.344	1.2E+00	2.4E+01	0.104	3.4E-01
Antimony	2.8E+00	0.0126	1.0	8.5E-03	0.58	7.6E-01	1.0	0.344	3.7E-02	5.6E-04	0.344	2.7E-05	9.3E-01	0.104	1.4E-02
Arsenic	8.9E+00	0.0126	1.0	2.7E-02	0.58	3.1E+00	1.0	0.344	1.5E-01	5.7E-04	0.344	2.7E-05	4.7E-01	0.104	6.9E-03
Barium	3.2E+02	0.0126	1.0	9.8E-01	0.58	3.1E+01	1.0	0.344	1.5E+00	8.1E-04	0.344	3.9E-05	9.0E+00	0.104	1.3E-01
Beryllium	6.5E-01	0.0126	1.0	2.0E-03	0.58	1.7E-01	1.0	0.344	8.2E-03	***1.1E-04***	0.344	5.5E-06	***1.9E-01***	0.104	2.8E-03
Cadmium	1.5E+02	0.0126	1.0	4.5E-01	0.58	1.2E+01	1.0	0.344	5.9E-01	1.4E-05	0.344	6.7E-07	1.9E-01	0.104	2.8E-03
Chromium	4.0E+01	0.0126	1.0	1.2E-01	0.58	3.8E+00	1.0	0.344	1.8E-01	1.2E-03	0.344	5.7E-05	3.6E-01	0.104	5.2E-03
Cobalt	8.2E+00	0.0126	1.0	2.5E-02	0.58	1.5E+00	1.0	0.344	7.1E-02	7.3E-02	0.344	3.5E-03	5.0E-01	0.104	7.2E-03
Copper	1.9E+02	0.0126	1.0	5.9E-01	0.58	2.2E+01	1.0	0.344	1.1E+00	9.4E-01	0.344	4.5E-02	3.8E+00	0.104	5.5E-02
Lead	3.1E+02	0.0126	1.0	9.3E-01	0.58	2.6E+01	1.0	0.344	1.2E+00	3.2E-04	0.344	1.5E-05	1.8E+00	0.104	2.6E-02
Manganese	5.0E+02	0.0126	1.0	1.5E+00	0.58	5.6E+01	1.0	0.344	2.7E+00	2.5E+00	0.344	1.2E-01	1.1E+01	0.104	1.5E-01
Mercury	1.1E+01	0.0126	1.0	3.3E-02	0.58	9.0E-01	1.0	0.344	4.3E-02	3.3E-04	0.344	1.6E-05	7.0E-01	0.104	1.0E-02
Nickel	3.8E+01	0.0126	1.0	1.2E-01	0.58	4.3E+00	1.0	0.344	2.1E-01	7.2E-03	0.344	3.5E-04	2.0E+00	0.104	2.9E-02
Selenium	1.5E+00	0.0126	1.0	4.5E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	1.3E-03	0.344	6.2E-05	9.4E-01	0.104	1.4E-02
Silver	1.6E+00	0.0126	1.0	4.9E-03	0.58	4.2E-01	1.0	0.344	2.0E-02	***8.6E-04***	0.344	4.1E-05	***4.8E-01***	0.104	7.0E-03
Thallium	1.2E+00	0.0126	1.0	3.6E-03	0.58	3.8E-01	1.0	0.344	1.8E-02	***1.1E-02***	0.344	5.5E-04	***4.8E-01***	0.104	7.0E-03
Vanadium	2.9E+01	0.0126	1.0	9.0E-02	0.58	3.5E+00	1.0	0.344	1.7E-01	1.3E-01	0.344	6.3E-03	4.6E-01	0.104	6.7E-03
Zinc	8.8E+02	0.0126	1.0	2.7E+00	0.58	9.6E+01	1.0	0.344	4.6E+00	1.5E-03	0.344	7.2E-05	2.8E+01	0.104	4.0E-01

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - Values for the shrew were obtained by multiplying the mean site-wide average daily dose (ADD) concentrations for the shrew by a factor of 1.0 to account for bioaccumulation but not biomagnification.
Values for the vole were obtained by multiplying the mean site-wide plant concentrations by their plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). If a BCF was not available for the compound, then the vole ADD was used as described for the shrew. See Table III-B1.
(c) - The dietary percentage of the shrew and vole were calculated by taking the dietary percentage of mammals for the fox (0.688) and dividing it by two. This assumes the fox will eat an equal amount of shrews and voles.
(d) - The dietary percentage of the pond water and river water were calculated by dividing the total length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond water ingestion = (1,375+2,770)/14956 = 0.28.
(e) - See Table III-C1.
(f) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values. (For the concentrations within the shrew and vole, the modeled values based on non-detects from all matricies are italicized)
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-58
Hazard Quotients for Ingestion of Mammals, Plants and Surface Water
Red Fox
Site-Wide 2002 River Data
Sauget, IL

Analyte	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Water (d)	Dose from Pond Surface Water (mg/kg/day)	Concentration of Contaminant in 2002 River Surface Water (All nearshore sample locations except Plot 1) (mg/L)	Dietary Percentage of River Water (d)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (e)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***5.0E-05***	0.72	3.3E-06	4.13	1.0	1.0E-03	1.6E+00	7.9E+00	6.4E-04	1.3E-04
4,4'-DDE	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***5.0E-05***	0.72	3.3E-06	4.13	1.0	1.5E-03	1.6E+00	7.9E+00	9.3E-04	1.9E-04
4,4'-DDT	0.38	4.8E-05	1.0	0.28	1.2E-06	***5.0E-05***	0.72	3.3E-06	4.13	1.0	8.6E-03	1.6E+00	7.9E+00	5.4E-03	1.1E-03
Aldrin	0.38	2.3E-05	1.0	0.28	6.0E-07	***2.5E-05***	0.72	1.7E-06	4.13	1.0	4.6E-04	1.4E-01	7.0E-01	3.3E-03	6.6E-04
alpha-BHC	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.7E-06	4.13	1.0	5.2E-04	1.1E-02	1.1E-01	4.6E-02	4.6E-03
alpha-Chlordane	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.7E-06	4.13	1.0	5.1E-04	2.0E+00	3.9E+00	2.6E-04	1.3E-04
beta-BHC	0.38	2.3E-05	1.0	0.28	6.0E-07	2.4E-05	0.72	1.6E-06	4.13	1.0	5.4E-03	2.8E-01	1.4E+00	1.9E-02	3.9E-03
delta-BHC	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.7E-06	4.13	1.0	4.5E-04	1.1E-02	1.1E-01	4.0E-02	4.0E-03
Dieldrin	0.38	4.1E-05	1.0	0.28	1.0E-06	***5.0E-05***	0.72	3.3E-06	4.13	1.0	2.4E-03	2.3E-02	2.3E-01	1.1E-01	1.1E-02
Endosulfan I	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.7E-06	4.13	1.0	4.6E-04	4.9E-02	4.9E-01	9.4E-03	9.4E-04
Endosulfan II	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***5.0E-05***	0.72	3.3E-06	4.13	1.0	1.6E-03	4.9E-02	4.9E-01	3.3E-02	3.3E-03
Endosulfan Sulfate	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***5.0E-05***	0.72	3.3E-06	4.13	1.0	8.9E-04	4.9E-02	4.9E-01	1.8E-02	1.8E-03
Endrin	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***5.0E-05***	0.72	3.3E-06	4.13	1.0	2.6E-03	7.8E-02	7.8E-01	3.3E-02	3.3E-03
Endrin Aldehyde	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***5.0E-05***	0.72	3.3E-06	4.13	1.0	9.5E-04	7.8E-02	7.8E-01	1.2E-02	1.2E-03
Endrin Ketone	0.38	***5.0E-05***	1.0	0.28	1.3E-06	4.9E-05	0.72	3.2E-06	4.13	1.0	9.3E-04	7.8E-02	7.8E-01	1.2E-02	1.2E-03
gamma-BHC (Lindane)	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.7E-06	4.13	1.0	1.7E-03	3.0E+00	3.0E+01	5.8E-04	5.8E-05
gamma-Chlordane	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.7E-06	4.13	1.0	1.0E-03	2.0E+00	3.9E+00	5.2E-04	2.6E-04
Heptachlor	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.7E-06	4.13	1.0	5.5E-04	1.1E-01	1.1E+00	4.8E-03	4.8E-04
Heptachlor Epoxide	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.7E-06	4.13	1.0	4.9E-04	1.6E-03	1.1E-02	3.2E-01	4.3E-02
Methoxychlor	0.38	***2.5E-04***	1.0	0.28	6.4E-06	***2.5E-04***	0.72	1.7E-05	4.13	1.0	4.3E-03	7.1E+00	1.4E+01	6.0E-04	3.0E-04
Toxaphene	0.38	***2.5E-03***	1.0	0.28	6.4E-05	***2.5E-03***	0.72	1.7E-04	4.13	1.0	4.7E-02	8.1E+00	8.1E+01	5.8E-03	5.8E-04
Herbicides															
2,4-D	0.38	***2.5E-04***	1.0	0.28	6.4E-06	3.0E-03	0.72	2.0E-04	4.13	1.0	5.8E-03	6.0E-01	3.0E+00	9.7E-03	1.9E-03
2,4-DB	0.38	***2.5E-04***	1.0	0.28	6.4E-06	***2.5E-04***	0.72	1.7E-05	4.13	1.0	4.8E-03	9.8E-01	3.1E+00	4.8E-03	1.5E-03
2,4,5-T	0.38	***2.5E-04***	1.0	0.28	6.4E-06	2.5E-04	0.72	1.7E-05	4.13	1.0	5.3E-03	2.6E+00	8.6E+00	2.1E-03	6.2E-04
2,4,5-TP (Silvex)	0.38	***2.5E-04***	1.0	0.28	6.4E-06	***2.5E-04***	0.72	1.7E-05	4.13	1.0	2.8E-03	8.0E-01	2.7E+00	3.5E-03	1.0E-03
Dalapon	0.38	***6.0E-02***	1.0	0.28	1.5E-03	***6.0E-02***	0.72	4.0E-03	4.13	1.0	3.2E-01	7.2E+00	2.5E+01	4.5E-02	1.3E-02
Dicamba	0.38	***6.0E-04***	1.0	0.28	1.5E-05	***6.0E-04***	0.72	4.0E-05	4.13	1.0	4.2E-03	2.8E+00	9.2E+00	1.5E-03	4.5E-04
Dichlorprop	0.38	***3.0E-03***	1.0	0.28	7.7E-05	2.2E-03	0.72	1.4E-04	4.13	1.0	3.2E-02	1.5E-01	1.5E+00	2.2E-01	2.2E-02
Dinoseb	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.5E-02	8.6E-02	8.6E-01	4.1E-01	4.1E-02
MCPA	0.38	***6.0E-02***	1.0	0.28	1.5E-03	***6.0E-02***	0.72	4.0E-03	4.13	1.0	1.3E+00	1.6E-01	8.0E-01	8.4E+00	1.7E+00
MCPP	0.38	***6.0E-02***	1.0	0.28	1.5E-03	***6.0E-02***	0.72	4.0E-03	4.13	1.0	6.8E-01	2.6E-01	7.7E-01	2.7E+00	8.9E-01
PCBs															
Total PCBs	0.38	2.3E-04	1.0	0.28	5.9E-06	***2.5E-04***	0.72	1.7E-05	4.13	1.0	4.3E-01	8.6E-02	8.6E-01	5.0E+00	5.0E-01
Dioxins/Furans (f)															
TEQ	0.38	8.1E-09	1.0	0.28	2.1E-10	***1.7E-09***	0.72	1.2E-10	4.13	1.0	1.8E-05	8.6E-07	8.6E-06	2.1E+01	2.1E+00
Metals															
Aluminum	0.38	1.1E+00	1.0	0.28	2.7E-02	8.0E-01	0.72	5.3E-02	4.13	1.0	7.0E+01	1.4E+00	1.4E+01	4.9E+01	4.9E+00
Antimony	0.38	***8.3E-03***	1.0	0.28	2.1E-04	9.7E-03	0.72	6.4E-04	4.13	1.0	6.0E-02	9.3E-02	9.3E-01	6.4E-01	6.4E-02
Arsenic	0.38	5.1E-03	1.0	0.28	1.3E-04	5.0E-03	0.72	3.3E-04	4.13	1.0	1.8E-01	6.7E-02	6.7E-01	2.8E+00	2.8E-01
Barium	0.38	1.4E-01	1.0	0.28	3.6E-03	6.2E-02	0.72	4.1E-03	4.13	1.0	2.6E+00	2.7E+00	1.0E+01	9.7E-01	2.5E-01
Beryllium	0.38	***2.0E-03***	1.0	0.28	5.2E-05	***2.0E-03***	0.72	1.3E-04	4.13	1.0	1.3E-02	5.7E-01	5.7E+00	2.3E-02	2.3E-03
Cadmium	0.38	2.3E-03	1.0	0.28	5.8E-05	***2.5E-03***	0.72	1.7E-04	4.13	1.0	1.0E+00	2.4E-01	2.4E+00	4.4E+00	4.4E-01
Chromium	0.38	5.1E-03	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.1E-01	2.8E+00	1.1E+01	1.1E-01	2.8E-02
Cobalt	0.38	5.5E-03	1.0	0.28	1.4E-04	4.6E-03	0.72	3.0E-04	4.13	1.0	1.1E-01	4.3E-02	4.3E-01	2.5E+00	2.5E-01
Copper	0.38	7.3E-03	1.0	0.28	1.9E-04	9.3E-03	0.72	6.2E-04	4.13	1.0	1.7E+00	1.1E+01	1.4E+01	1.6E-01	1.2E-01
Lead	0.38	4.0E-03	1.0	0.28	1.0E-04	2.5E-03	0.72	1.7E-04	4.13	1.0	2.2E+00	6.9E+00	6.9E+01	3.2E-01	3.2E-02
Manganese	0.38	1.1E-01	1.0	0.28	2.8E-03	9.2E-02	0.72	6.1E-03	4.13	1.0	4.5E+00	7.5E+01	2.4E+02	6.0E-02	1.9E-02
Mercury	0.38	9.7E-05	1.0	0.28	2.5E-06	1.0E-04	0.72	6.8E-06	4.13	1.0	8.7E-02	8.8E-03	1.5E-02	9.9E+00	5.9E+00
Nickel	0.38	1.4E-02	1.0	0.28	3.7E-04	***2.0E-02***	0.72	1.3E-03	4.13	1.0	3.6E-01	3.4E+01	6.9E+01	1.0E-02	5.2E-03
Selenium	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	4.3E-02	2.1E-01	3.4E-01	2.1E-01	1.2E-01
Silver	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.3E-02	1.3E-01	1.3E+00	2.4E-01	2.4E-02
Thallium	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.0E-02	4.5E-03	4.5E-02	6.5E+00	6.5E-01
Vanadium	0.38	5.7E-03	1.0	0.28	1.5E-04	4.9E-03	0.72	3.2E-04	4.13	1.0	2.7E-01	3.5E-01	3.5E+00	7.7E-01	7.7E-02
Zinc	0.38	2.2E-02	1.0	0.28	5.5E-04	8.0E-03	0.72	5.3E-04	4.13	1.0	7.7E+00	1.1E+02	2.2E+02	7.1E-02	3.5E-02

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - Values for the shrew were obtained by multiplying the mean site-wide average daily dose (ADD) concentrations for the shrew by a factor of 1.0 to account for bioaccumulation but not biomagnification.
Values for the vole were obtained by multiplying the mean site-wide plant concentrations by their plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). If a BCF was not available for the compound, then the vole ADD was used as described for the shrew. See Table III-B1.
(c) - The dietary percentage of the shrew and vole were calculated by taking the dietary percentage of mammals for the fox (0.688) and dividing it by two. This assumes the fox will eat an equal amount of shrews and voles.
(d) - The dietary percentage of the pond water and river water were calculated by dividing the total length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond water ingestion = (1,375+2,770)/14956 = 0.28.
(e) - See Table III-C1.
(f) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values. (For the concentrations within the shrew and vole, the modeled values based on non-detects from all matricies are italicized)
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-59
Hazard Quotients for Ingestion of Mammals, Plants and Surface Water
Red Fox
Site-Wide 2007 River Data
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Shrew (b) (mg/kg)	Area Use Factor (a)	Dietary Percentage of Shrew (a)(c)	Dose from Shrew (mg/kg/day)	Concentration of Contaminant in Prairie Vole (b) (mg/kg)	Dietary Percentage of Prairie Vole (a)(c)	Dose from Prairie Vole (mg/kg/day)	Concentration of Contaminant in Plants (mg/kg)	Dietary Percentage of Plants (a)	Dose from Plants (mg/kg/day)
SVOCs															
1,2,4-Trichlorobenzene	1.0E+00	0.0126	1.0	3.1E-03	0.58	5.3E-01	1.0	0.344	2.6E-02	5.2E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
1,2-Dichlorobenzene	1.0E+00	0.0126	1.0	3.2E-03	0.58	5.3E-01	1.0	0.344	2.6E-02	5.3E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
1,3-Dichlorobenzene	4.1E-01	0.0126	1.0	1.2E-03	0.58	4.8E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
1,4-Dichlorobenzene	5.2E-01	0.0126	1.0	1.6E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2,2'-Oxybis(1-Chloropropane)	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2,4,5-Trichlorophenol	4.1E-01	0.0126	1.0	1.3E-03	0.58	4.9E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2,4,6-Trichlorophenol	5.4E-01	0.0126	1.0	1.7E-03	0.58	5.0E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2,4-Dichlorophenol	4.3E-01	0.0126	1.0	1.3E-03	0.58	4.9E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
2,4-Dinitrophenol	***2.7E+00***	0.0126	1.0	8.3E-03	0.58	***2.5E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.3E-02	***2.6E+00***	0.104	3.7E-02
2,4-Dinitrotoluene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***7.4E-07***	0.344	3.6E-08	***5.0E-01***	0.104	7.2E-03
2,6-Dinitrotoluene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.7E-07***	0.344	2.8E-08	***5.0E-01***	0.104	7.2E-03
2-Chloronaphthalene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2-Chlorophenol	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2-Methylnaphthalene	5.7E-01	0.0126	1.0	1.7E-03	0.58	5.0E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2-Methylphenol (o-Cresol)	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
2-Nitroaniline	2.0E+00	0.0126	1.0	6.0E-03	0.58	2.4E+00	1.0	0.344	1.2E-01	2.6E-01	0.344	1.3E-02	***2.6E+00***	0.104	3.7E-02
2-Nitrophenol	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
3,3'-Dichlorobenzidine	***1.0E+00***	0.0126	1.0	3.2E-03	0.58	***9.9E-01***	1.0	0.344	4.8E-02	***1.0E-01***	0.344	5.0E-03	***1.0E+00***	0.104	1.5E-02
3/4-Methylphenol (m&p-Cresol)	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
3-Nitroaniline	***2.7E+00***	0.0126	1.0	8.1E-03	0.58	***2.5E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.3E-02	***2.6E+00***	0.104	3.7E-02
4,6-Dinitro-2-methylphenol	***2.7E+00***	0.0126	1.0	8.1E-03	0.58	***2.5E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.3E-02	***2.6E+00***	0.104	3.7E-02
4-Bromophenyl Phenyl Ether	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
4-Chloro-3-methylphenol	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
4-Chloroaniline	1.3E+00	0.0126	1.0	3.8E-03	0.58	1.0E+00	1.0	0.344	4.8E-02	1.0E-01	0.344	5.0E-03	***1.0E+00***	0.104	1.5E-02
4-Chlorophenyl Phenyl Ether	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
4-Nitroaniline	3.0E+00	0.0126	1.0	9.0E-03	0.58	2.5E+00	1.0	0.344	1.2E-01	2.6E-01	0.344	1.3E-02	***2.6E+00***	0.104	3.7E-02
4-Nitrophenol	***2.7E+00***	0.0126	1.0	8.1E-03	0.58	***2.5E+00***	1.0	0.344	1.2E-01	***2.6E-01***	0.344	1.3E-02	***2.6E+00***	0.104	3.7E-02
Acenaphthene	3.6E-01	0.0126	1.0	1.1E-03	0.58	4.8E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Acenaphthylene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Anthracene	5.2E-01	0.0126	1.0	1.6E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Benzo(a)anthracene	6.7E-01	0.0126	1.0	2.0E-03	0.58	5.1E-01	1.0	0.344	2.4E-02	***3.6E-03***	0.344	1.7E-04	***5.0E-01***	0.104	7.2E-03
Benzo(a)pyrene	6.3E-01	0.0126	1.0	1.9E-03	0.58	5.0E-01	1.0	0.344	2.4E-02	***1.0E-02***	0.344	4.8E-04	***5.0E-01***	0.104	7.2E-03
Benzo(b)fluoranthene	6.8E-01	0.0126	1.0	2.1E-03	0.58	5.0E-01	1.0	0.344	2.4E-02	***1.2E-02***	0.344	5.7E-04	***5.0E-01***	0.104	7.2E-03
Benzo(g,h,i)perylene	5.3E-01	0.0126	1.0	1.6E-03	0.58	4.9E-01	1.0	0.344	2.3E-02	4.7E-02	0.344	2.3E-03	4.5E-01	0.104	6.6E-03
Benzo(k)fluoranthene	6.0E-01	0.0126	1.0	1.8E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	***1.2E-02***	0.344	5.7E-04	***5.0E-01***	0.104	7.2E-03
bis(2-Chloroethoxy)methane	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
bis(2-Chloroethyl)ether	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
bis(2-Ethylhexyl)phthalate	9.1E-01	0.0126	1.0	2.8E-03	0.58	5.2E-01	1.0	0.344	2.5E-02	1.2E-03	0.344	5.6E-05	4.8E-01	0.104	7.0E-03
Butyl Benzyl Phthalate	4.8E+00	0.0126	1.0	1.5E-02	0.58	8.3E-01	1.0	0.344	4.0E-02	6.3E-02	0.344	3.1E-03	***5.0E-01***	0.104	7.2E-03
Carbazole	4.8E-01	0.0126	1.0	1.5E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Chrysene	9.2E-01	0.0126	1.0	2.8E-03	0.58	5.1E-01	1.0	0.344	2.5E-02	***4.1E-03***	0.344	2.0E-04	***5.0E-01***	0.104	7.2E-03
Dibenzo(a,h)anthracene	4.1E-01	0.0126	1.0	1.2E-03	0.58	4.9E-01	1.0	0.344	2.3E-02	***2.6E-02***	0.344	1.3E-03	***5.0E-01***	0.104	7.2E-03
Dibenzofuran	5.0E-01	0.0126	1.0	1.5E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Diethyl Phthalate	5.1E-01	0.0126	1.0	1.6E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Dimethyl Phthalate	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Di-n-butylphthalate	4.9E-01	0.0126	1.0	1.5E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	4.1E-02	0.344	2.0E-03	3.9E-01	0.104	5.7E-03
Di-n-octylphthalate	4.1E-01	0.0126	1.0	1.3E-03	0.58	4.8E-01	1.0	0.344	2.3E-02	***1.6E+01***	0.344	7.7E-01	***5.0E-01***	0.104	7.2E-03
Fluoranthene	8.8E-01	0.0126	1.0	2.7E-03	0.58	5.2E-01	1.0	0.344	2.5E-02	5.2E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Fluorene	4.0E-01	0.0126	1.0	1.2E-03	0.58	4.8E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Hexachlorobenzene	5.1E-01	0.0126	1.0	1.5E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	***2.4E-03***	0.344	1.1E-04	***5.0E-01***	0.104	7.2E-03
Hexachlorobutadiene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***4.0E-04***	0.344	1.9E-05	***5.0E-01***	0.104	7.2E-03
Hexachlorocyclopentadiene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***6.0E-04***	0.344	2.9E-05	***5.0E-01***	0.104	7.2E-03
Hexachloroethane	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Indeno(1,2,3-cd)pyrene	4.1E-01	0.0126	1.0	1.2E-03	0.58	4.8E-01	1.0	0.344	2.3E-02	***6.1E-02***	0.344	3.0E-03	***5.0E-01***	0.104	7.2E-03
Isophorone	5.2E-01	0.0126	1.0	1.6E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.1E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Naphthalene	4.2E-01	0.0126	1.0	1.3E-03	0.58	4.9E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
Nitrobenzene	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-07***	0.344	2.5E-08	***5.0E-01***	0.104	7.2E-03
N-Nitroso-di-n-propylamine	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
N-Nitrosodiphenylamine	***5.1E-01***	0.0126	1.0	1.6E-03	0.58	***4.9E-01***	1.0	0.344	2.4E-02	***5.1E-02***	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Pentachlorophenol	1.7E+01	0.0126	1.0	5.3E-02	0.58	1.4E+00	1.0	0.344	6.7E-02	***5.7E-05***	0.344	2.7E-06	***3.1E-02***	0.104	4.6E-04
Phenanthrene	7.8E-01	0.0126	1.0	2.4E-03	0.58	5.1E-01	1.0	0.344	2.5E-02	5.2E-02	0.344	2.5E-03	***5.0E-01***	0.104	7.2E-03
Phenol	5.2E-01	0.0126	1.0	1.6E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	5.0E-02	0.344	2.4E-03	4.8E-01	0.104	7.0E-03
Pyrene	1.3E+00	0.0126	1.0	3.9E-03	0.58	5.5E-01	1.0	0.344	2.7E-02	5.3E-02	0.344	2.6E-03	***5.0E-01***	0.104	7.2E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - Values for the shrew were obtained by multiplying the mean site-wide average daily dose (ADD) concentrations for the shrew by a factor of 1.0 to account for bioaccumulation but not biomagnification.
Values for the vole were obtained by multiplying the mean site-wide plant concentrations by their plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). If a BCF was not available for the compound, then the vole ADD was used as
(c) - The dietary percentage of the shrew and vole were calculated by taking the dietary percentage of mammals for the fox (0.688) and dividing it by two. This assumes the fox will eat an equal amount of shrews and voles.
(d) - The dietary percentage of the pond water and river water were calculated by dividing the total length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond water ingestion = (1,375+2,770)/14956 = 0.28.
(e) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values. (For the concentrations within the shrew and vole, the modeled values based on non-detects from all matr
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-59
Hazard Quotients for Ingestion of Mammals, Plants and Surface Water
Red Fox
Site-Wide 2007 River Data
Sauget, IL

Analyte	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Water (d)	Dose from Pond Surface Water (mg/kg/day)	Concentration of Contaminant in 2007 River Surface Water (All nearshore sample locations) (mg/L)	Dietary Percentage of River Water (d)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (e)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
SVOCs															
1,2,4-Trichlorobenzene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.9E-02	1.3E+01	4.6E+01	3.1E-03	8.5E-04
1,2-Dichlorobenzene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.9E-02	7.4E+01	1.0E+03	5.3E-04	3.8E-05
1,3-Dichlorobenzene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	7.4E+01	1.0E+03	4.7E-04	3.4E-05
1,4-Dichlorobenzene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	7.4E+01	1.3E+02	4.8E-04	2.8E-04
2,2'-Oxybis(1-Chloropropane)	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	2.7E+01	1.5E+02	1.3E-03	2.4E-04
2,4,5-Trichlorophenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	8.6E+00	2.6E+01	4.0E-03	1.3E-03
2,4,6-Trichlorophenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.6E-02	4.3E+02	2.6E+01	8.3E-05	1.4E-03
2,4-Dichlorophenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	2.6E-01	2.6E+00	1.4E-01	1.4E-02
2,4-Dinitrophenol	0.38	***2.5E-02***	1.0	0.28	6.4E-04	***2.4E-02***	0.72	1.6E-03	4.13	1.0	1.8E-01	1.2E-03	1.2E-02	1.6E+02	1.6E+01
2,4-Dinitrotoluene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.3E-02	2.1E-01	1.6E+00	1.5E-01	2.1E-02
2,6-Dinitrotoluene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.3E-02	6.0E-01	6.0E+00	5.5E-02	5.5E-03
2-Chloronaphthalene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	1.9E+01	4.4E+01	1.9E-03	8.0E-04
2-Chlorophenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	4.3E+01	4.3E+00	8.3E-04	8.3E-03
2-Methylnaphthalene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.6E-02	2.1E+03	2.1E+04	1.7E-05	1.7E-06
2-Methylphenol (o-Cresol)	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	2.0E+02	2.0E+03	1.8E-04	1.8E-05
2-Nitroaniline	0.38	***2.5E-02***	1.0	0.28	6.4E-04	***2.4E-02***	0.72	1.6E-03	4.13	1.0	1.8E-01	3.6E+00	3.6E+01	4.9E-02	4.9E-03
2-Nitrophenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	2.1E+00	6.0E+00	1.7E-02	5.9E-03
3,3'-Dichlorobenzidine	0.38	***1.0E-02***	1.0	0.28	2.6E-04	***9.5E-03***	0.72	6.3E-04	4.13	1.0	7.1E-02	1.1E+01	3.8E+02	6.4E-03	1.9E-04
3/4-Methylphenol (m&p-Cresol)	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	2.0E+02	2.0E+03	1.8E-04	1.8E-05
3-Nitroaniline	0.38	***2.5E-02***	1.0	0.28	6.4E-04	***2.4E-02***	0.72	1.6E-03	4.13	1.0	1.8E-01	3.6E+00	3.6E+01	5.0E-02	5.0E-03
4,6-Dinitro-2-methylphenol	0.38	***2.5E-02***	1.0	0.28	6.4E-04	***2.4E-02***	0.72	1.6E-03	4.13	1.0	1.8E-01	2.1E-01	3.9E+00	8.4E-01	4.6E-02
4-Bromophenyl Phenyl Ether	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	8.6E-01	6.9E+00	4.1E-02	5.2E-03
4-Chloro-3-methylphenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	9.6E+01	9.6E+02	3.7E-04	3.7E-05
4-Chloroaniline	0.38	***1.0E-02***	1.0	0.28	2.6E-04	***9.5E-03***	0.72	6.3E-04	4.13	1.0	7.3E-02	1.1E+00	1.1E+01	6.8E-02	6.8E-03
4-Chlorophenyl Phenyl Ether	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	8.6E-01	6.9E+00	4.1E-02	5.2E-03
4-Nitroaniline	0.38	***2.5E-02***	1.0	0.28	6.4E-04	***2.4E-02***	0.72	1.6E-03	4.13	1.0	1.8E-01	3.6E+00	3.6E+01	5.1E-02	5.1E-03
4-Nitrophenol	0.38	***2.5E-02***	1.0	0.28	6.4E-04	***2.4E-02***	0.72	1.6E-03	4.13	1.0	1.8E-01	2.1E+00	6.0E+00	8.4E-02	3.0E-02
Acenaphthene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.4E-02	1.3E+01	2.6E+01	2.7E-03	1.3E-03
Acenaphthylene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	1.3E+01	2.6E+01	2.7E-03	1.4E-03
Anthracene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	7.4E+01	7.4E+02	4.8E-04	4.8E-05
Benzo(a)anthracene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.6E-02	4.6E-03
Benzo(a)pyrene	0.38	4.6E-03	1.0	0.28	1.2E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.6E-02	4.6E-03
Benzo(b)fluoranthene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.6E-02	4.6E-03
Benzo(g,h,i)perylene	0.38	4.6E-03	1.0	0.28	1.2E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.6E-02	4.6E-03
Benzo(k)fluoranthene	0.38	5.2E-03	1.0	0.28	1.4E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.6E-02	4.6E-03
bis(2-Chloroethoxy)methane	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	2.7E+01	1.5E+02	1.3E-03	2.4E-04
bis(2-Chloroethyl)ether	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	2.7E+01	1.5E+02	1.3E-03	2.4E-04
bis(2-Ethylhexyl)phthalate	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	2.6E+02	2.6E+03	1.4E-04	1.4E-05
Butyl Benzyl Phthalate	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	6.5E-02	1.4E+01	4.0E+01	4.8E-03	1.6E-03
Carbazole	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	2.2E+00	2.2E+01	1.6E-02	1.6E-03
Chrysene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	7.4E-01	7.4E+00	4.8E-02	4.8E-03
Dibenzo(a,h)anthracene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.4E-02	7.4E-01	7.4E+00	4.5E-02	4.5E-03
Dibenzofuran	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	1.1E-02	1.1E-01	3.1E+00	3.1E-01
Diethyl Phthalate	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	1.1E+03	1.1E+04	3.2E-05	3.2E-06
Dimethyl Phthalate	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	3.4E+03	3.4E+04	1.0E-05	1.0E-06
Di-n-butylphthalate	0.38	4.6E-03	1.0	0.28	1.2E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.3E-02	3.1E+03	1.0E+04	1.1E-05	3.2E-06
Di-n-octylphthalate	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	8.0E-01	4.1E+02	1.4E+03	2.0E-03	5.9E-04
Fluoranthene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.8E-02	9.3E+00	1.9E+01	4.1E-03	2.1E-03
Fluorene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	9.3E+00	1.9E+01	3.7E-03	1.9E-03
Hexachlorobenzene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.3E-02	6.9E-02	2.5E-01	4.8E-01	1.3E-01
Hexachlorobutadiene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.3E-02	1.7E-01	1.7E-01	1.9E-01	1.9E-01
Hexachlorocyclopentadiene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.3E-02	5.1E-01	9.4E-01	6.4E-02	3.5E-02
Hexachloroethane	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	8.6E-02	1.3E+00	4.1E-01	2.8E-02
Indeno(1,2,3-cd)pyrene	0.38	4.8E-03	1.0	0.28	1.2E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	7.4E-01	7.4E+00	4.8E-02	4.8E-03
Isophorone	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	1.6E+01	1.5E+02	2.2E-03	2.3E-04
Naphthalene	0.38	4.9E-03	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	6.1E+00	1.2E+01	5.7E-03	2.9E-03
Nitrobenzene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.3E-02	3.4E-02	3.4E-01	9.7E-01	9.7E-02
N-Nitroso-di-n-propylamine	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	7.4E-03	7.4E-02	4.8E+00	4.8E-01
N-Nitrosodiphenylamine	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	1.7E+02	4.3E+01	2.1E-04	8.3E-04
Pentachlorophenol	0.38	***5.0E-04***	1.0	0.28	1.3E-05	***1.2E-04***	0.72	8.1E-06	4.13	1.0	1.2E-01	1.5E-01	1.5E+00	8.0E-01	8.0E-02
Phenanthrene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.7E-02	1.3E+01	2.6E+01	2.9E-03	1.4E-03
Phenol	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	5.1E+01	1.0E+02	6.8E-04	3.4E-04
Pyrene	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	4.1E-02	5.6E+00	9.3E+00	7.3E-03	4.4E-03

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - Values for the shrew were obtained by multiplying the mean site-wide average daily dose (ADD) concentrations for the shrew by a factor of 1.0 to account for bioaccumulation but not biomagnification.
Values for the vole were obtained by multiplying the mean site-wide plant concentrations by their plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). If a BCF was not available for the compound, then the vole ADD was used as
(c) - The dietary percentage of the shrew and vole were calculated by taking the dietary percentage of mammals for the fox (0.688) and dividing it by two. This assumes the fox will eat an equal amount of shrews and voles.
(d) - The dietary percentage of the pond water and river water were calculated by dividing the total length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond water ingestion = (1,375+2,770)/14956 = 0.28.
(e) - See Table III-C1.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values. (For the concentrations within the shrew and vole, the modeled values based on non-detects from all matr
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-59
Hazard Quotients for Ingestion of Mammals, Plants and Surface Water
Red Fox
Site-Wide 2007 River Data
Sauget, IL

Analyte	Concentration of Contaminant in Soil (mg/kg)	Soil Ingestion Rate (a) (kg/day)	Area Use Factor (a)	Dose from Soil (mg/kg/day)	Dietary Ingestion Rate (a) (kg/day)	Concentration of Contaminant in Shrew (b) (mg/kg)	Area Use Factor (a)	Dietary Percentage of Shrew (a)(c)	Dose from Shrew (mg/kg/day)	Concentration of Contaminant in Prairie Vole (b) (mg/kg)	Dietary Percentage of Prairie Vole (a)(c)	Dose from Prairie Vole (mg/kg/day)	Concentration of Contaminant in Plants (mg/kg)	Dietary Percentage of Plants (a)	Dose from Plants (mg/kg/day)
Pesticides															
4,4'-DDD	6.2E-02	0.0126	1.0	1.9E-04	0.58	1.5E-02	1.0	0.344	7.2E-04	6.7E-04	0.344	3.2E-05	4.9E-03	0.104	7.1E-05
4,4'-DDE	1.4E-01	0.0126	1.0	4.2E-04	0.58	2.0E-02	1.0	0.344	9.7E-04	1.4E-04	0.344	6.6E-06	5.0E-03	0.104	7.3E-05
4,4'-DDT	7.3E-01	0.0126	1.0	2.2E-03	0.58	1.3E-01	1.0	0.344	6.2E-03	2.5E-03	0.344	1.2E-04	4.3E-03	0.104	6.2E-05
Aldrin	3.1E-02	0.0126	1.0	9.5E-05	0.58	6.4E-03	1.0	0.344	3.1E-04	3.3E-04	0.344	1.6E-05	2.4E-03	0.104	3.5E-05
alpha-BHC	4.0E-02	0.0126	1.0	1.2E-04	0.58	7.1E-03	1.0	0.344	3.4E-04	3.5E-04	0.344	1.7E-05	2.3E-03	0.104	3.3E-05
alpha-Chlordane	3.3E-02	0.0126	1.0	1.0E-04	0.58	7.4E-03	1.0	0.344	3.5E-04	3.5E-04	0.344	1.7E-05	2.6E-03	0.104	3.7E-05
beta-BHC	7.3E-01	0.0126	1.0	2.2E-03	0.58	6.2E-02	1.0	0.344	3.0E-03	2.4E-03	0.344	1.2E-04	3.3E-03	0.104	4.8E-05
delta-BHC	2.7E-02	0.0126	1.0	8.2E-05	0.58	6.5E-03	1.0	0.344	3.1E-04	3.2E-04	0.344	1.5E-05	2.4E-03	0.104	3.5E-05
Dieldrin	9.9E-02	0.0126	1.0	3.0E-04	0.58	4.2E-02	1.0	0.344	2.0E-03	7.1E-04	0.344	3.4E-05	4.3E-03	0.104	6.2E-05
Endosulfan I	***3.1E-02***	0.0126	1.0	9.5E-05	0.58	6.4E-03	1.0	0.344	3.1E-04	***3.5E-04***	0.344	1.7E-05	***2.6E-03***	0.104	3.9E-05
Endosulfan II	1.6E-01	0.0126	1.0	4.9E-04	0.58	2.1E-02	1.0	0.344	1.0E-03	9.1E-04	0.344	4.4E-05	4.4E-03	0.104	6.4E-05
Endosulfan Sulfate	6.5E-02	0.0126	1.0	2.0E-04	0.58	1.2E-02	1.0	0.344	5.9E-04	6.8E-04	0.344	3.3E-05	4.9E-03	0.104	7.1E-05
Endrin	2.9E-01	0.0126	1.0	9.0E-04	0.58	3.2E-02	1.0	0.344	1.5E-03	1.3E-03	0.344	6.4E-05	4.9E-03	0.104	7.1E-05
Endrin Aldehyde	6.5E-02	0.0126	1.0	2.0E-04	0.58	1.3E-02	1.0	0.344	6.3E-04	7.8E-04	0.344	3.7E-05	5.9E-03	0.104	8.6E-05
Endrin Ketone	6.5E-02	0.0126	1.0	2.0E-04	0.58	1.3E-02	1.0	0.344	6.3E-04	6.8E-04	0.344	3.3E-05	4.9E-03	0.104	7.2E-05
gamma-BHC (Lindane)	2.2E-01	0.0126	1.0	6.6E-04	0.58	2.1E-02	1.0	0.344	1.0E-03	8.6E-04	0.344	4.2E-05	2.4E-03	0.104	3.5E-05
gamma-Chlordane	1.1E-01	0.0126	1.0	3.4E-04	0.58	1.2E-02	1.0	0.344	6.0E-04	5.8E-04	0.344	2.8E-05	2.6E-03	0.104	3.7E-05
Heptachlor	4.8E-02	0.0126	1.0	1.5E-04	0.58	7.5E-03	1.0	0.344	3.6E-04	4.0E-06	0.344	1.9E-07	2.6E-03	0.104	3.8E-05
Heptachlor Epoxide	3.5E-02	0.0126	1.0	1.1E-04	0.58	6.8E-03	1.0	0.344	3.3E-04	3.6E-04	0.344	1.7E-05	2.6E-03	0.104	3.8E-05
Methoxychlor	3.2E-01	0.0126	1.0	9.8E-04	0.58	5.4E-02	1.0	0.344	2.6E-03	4.0E-03	0.344	1.9E-04	3.1E-02	0.104	4.5E-04
Toxaphene	***3.1E+00***	0.0126	1.0	9.5E-03	0.58	***6.6E-01***	1.0	0.344	3.2E-02	***3.5E-02***	0.344	1.7E-03	***2.6E-01***	0.104	3.9E-03
Herbicides															
2,4-D	3.0E-01	0.0126	1.0	9.0E-04	0.58	7.7E-02	1.0	0.344	3.7E-03	5.7E-03	0.344	2.8E-04	4.9E-02	0.104	7.1E-04
2,4-DB	2.4E-01	0.0126	1.0	7.3E-04	0.58	3.5E-02	1.0	0.344	1.7E-03	1.3E-02	0.344	6.0E-04	1.2E-01	0.104	1.7E-03
2,4,5-T	5.6E-01	0.0126	1.0	1.7E-03	0.58	5.8E-02	1.0	0.344	2.8E-03	5.2E-03	0.344	2.5E-04	3.6E-02	0.104	5.3E-04
2,4,5-TP (Silvex)	2.4E-01	0.0126	1.0	7.3E-04	0.58	3.3E-02	1.0	0.344	1.6E-03	2.6E-03	0.344	1.3E-04	1.9E-02	0.104	2.8E-04
Dalapon	***1.1E+01***	0.0126	1.0	3.3E-02	0.58	***4.4E+00***	1.0	0.344	2.1E-01	***4.0E-01***	0.344	1.9E-02	***3.7E+00***	0.104	5.4E-02
Dicamba	2.5E-01	0.0126	1.0	7.5E-04	0.58	5.5E-02	1.0	0.344	2.6E-03	4.4E-03	0.344	2.1E-04	***3.7E-02***	0.104	5.4E-04
Dichlorprop	2.8E+00	0.0126	1.0	8.6E-03	0.58	4.0E-01	1.0	0.344	1.9E-02	2.7E-02	0.344	1.3E-03	1.9E-01	0.104	2.7E-03
Dinoseb	4.2E-01	0.0126	1.0	1.3E-03	0.58	4.9E-01	1.0	0.344	2.3E-02	5.1E-02	0.344	2.4E-03	***5.0E-01***	0.104	7.2E-03
MCPA	5.6E+01	0.0126	1.0	1.7E-01	0.58	2.2E+01	1.0	0.344	1.1E+00	6.7E-01	0.344	3.2E-02	5.1E+00	0.104	7.5E-02
MCPP	6.0E+01	0.0126	1.0	1.8E-01	0.58	8.3E+00	1.0	0.344	4.0E-01	6.3E-01	0.344	3.0E-02	4.6E+00	0.104	6.7E-02
PCBs															
Total PCBs	5.0E+01	0.0126	1.0	1.5E-01	0.58	5.5E+00	1.0	0.344	2.7E-01	1.5E-01	0.344	7.0E-03	***2.5E-02***	0.104	3.6E-04
Dioxins/Furans (f)															
TEQ	2.2E-03	0.0126	1.0	6.9E-06	0.58	2.4E-04	1.0	0.344	1.1E-05	1.9E-08	0.344	8.9E-10	5.7E-07	0.104	8.3E-09
Metals															
Aluminum	8.1E+03	0.0126	1.0	2.5E+01	0.58	9.1E+02	1.0	0.344	4.4E+01	2.6E+01	0.344	1.2E+00	2.4E+01	0.104	3.4E-01
Antimony	2.8E+00	0.0126	1.0	8.5E-03	0.58	7.6E-01	1.0	0.344	3.7E-02	5.6E-04	0.344	2.7E-05	9.3E-01	0.104	1.4E-02
Arsenic	8.9E+00	0.0126	1.0	2.7E-02	0.58	3.1E+00	1.0	0.344	1.5E-01	5.7E-04	0.344	2.7E-05	4.7E-01	0.104	6.9E-03
Barium	3.2E+02	0.0126	1.0	9.8E-01	0.58	3.1E+01	1.0	0.344	1.5E+00	8.1E-04	0.344	3.9E-05	9.0E+00	0.104	1.3E-01
Beryllium	6.5E-01	0.0126	1.0	2.0E-03	0.58	1.7E-01	1.0	0.344	8.2E-03	***1.1E-04***	0.344	5.5E-06	***1.9E-01***	0.104	2.8E-03
Cadmium	1.5E+02	0.0126	1.0	4.5E-01	0.58	1.2E+01	1.0	0.344	5.9E-01	1.4E-05	0.344	6.7E-07	1.9E-01	0.104	2.8E-03
Chromium	4.0E+01	0.0126	1.0	1.2E-01	0.58	3.8E+00	1.0	0.344	1.8E-01	1.2E-03	0.344	5.7E-05	3.6E-01	0.104	5.2E-03
Cobalt	8.2E+00	0.0126	1.0	2.5E-02	0.58	1.5E+00	1.0	0.344	7.1E-02	7.3E-02	0.344	3.5E-03	5.0E-01	0.104	7.2E-03
Copper	1.9E+02	0.0126	1.0	5.9E-01	0.58	2.2E+01	1.0	0.344	1.1E+00	9.4E-01	0.344	4.5E-02	3.8E+00	0.104	5.5E-02
Lead	3.1E+02	0.0126	1.0	9.3E-01	0.58	2.6E+01	1.0	0.344	1.2E+00	3.2E-04	0.344	1.5E-05	1.8E+00	0.104	2.6E-02
Manganese	5.0E+02	0.0126	1.0	1.5E+00	0.58	5.6E+01	1.0	0.344	2.7E+00	2.5E+00	0.344	1.2E-01	1.1E+01	0.104	1.5E-01
Mercury	1.1E+01	0.0126	1.0	3.3E-02	0.58	9.0E-01	1.0	0.344	4.3E-02	3.3E-04	0.344	1.6E-05	7.0E-01	0.104	1.0E-02
Nickel	3.8E+01	0.0126	1.0	1.2E-01	0.58	4.3E+00	1.0	0.344	2.1E-01	7.2E-03	0.344	3.5E-04	2.0E+00	0.104	2.9E-02
Selenium	1.5E+00	0.0126	1.0	4.5E-03	0.58	4.9E-01	1.0	0.344	2.4E-02	1.3E-03	0.344	6.2E-05	9.4E-01	0.104	1.4E-02
Silver	1.6E+00	0.0126	1.0	4.9E-03	0.58	4.2E-01	1.0	0.344	2.0E-02	***8.6E-04***	0.344	4.1E-05	***4.8E-01***	0.104	7.0E-03
Thallium	1.2E+00	0.0126	1.0	3.6E-03	0.58	3.8E-01	1.0	0.344	1.8E-02	***1.1E-02***	0.344	5.5E-04	***4.8E-01***	0.104	7.0E-03
Vanadium	2.9E+01	0.0126	1.0	9.0E-02	0.58	3.5E+00	1.0	0.344	1.7E-01	1.3E-01	0.344	6.3E-03	4.6E-01	0.104	6.7E-03
Zinc	8.8E+02	0.0126	1.0	2.7E+00	0.58	9.6E+01	1.0	0.344	4.6E+00	1.5E-03	0.344	7.2E-05	2.8E+01	0.104	4.0E-01

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - Values for the shrew were obtained by multiplying the mean site-wide average daily dose (ADD) concentrations for the shrew by a factor of 1.0 to account for bioaccumulation but not biomagnification.
Values for the vole were obtained by multiplying the mean site-wide plant concentrations by their plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). If a BCF was not available for the compound, then the vole ADD was used as
(c) - The dietary percentage of the shrew and vole were calculated by taking the dietary percentage of mammals for the fox (0.688) and dividing it by two. This assumes the fox will eat an equal amount of shrews and voles.
(d) - The dietary percentage of the pond water and river water were calculated by dividing the total length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond water ingestion = (1,375+2,770)/14956 = 0.28.
(e) - See Table III-C1.
(f) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values. (For the concentrations within the shrew and vole, the modeled values based on non-detects from all matr
A shaded cell indicates an HQ of equal to or greater than 1.0.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

Table 7-59
Hazard Quotients for Ingestion of Mammals, Plants and Surface Water
Red Fox
Site-Wide 2007 River Data
Sauget, IL

Analyte	Surface Water Ingestion Rate (a) (L/day)	Concentration of Contaminant in Pond Surface Water (mg/L)	Area Use Factor (a)	Dietary Percentage of Pond Water (d)	Dose from Pond Surface Water (mg/kg/day)	Concentration of Contaminant in 2007 River Surface Water (All nearshore sample locations) (mg/L)	Dietary Percentage of River Water (d)	Dose from River Surface Water (mg/kg/day)	Average Body Weight (a) (kg)	Seasonal Use Factor (a)	Average Daily Dose (mg/kg/day)	Toxicity Reference Value (TRV) (e)		Hazard Quotient	
												(NOAEL)	(LOAEL)	NOAEL HQ	LOAEL HQ
Pesticides															
4,4'-DDD	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***4.9E-05***	0.72	3.2E-06	4.13	1.0	1.0E-03	1.6E+00	7.9E+00	6.4E-04	1.3E-04
4,4'-DDE	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***4.9E-05***	0.72	3.2E-06	4.13	1.0	1.5E-03	1.6E+00	7.9E+00	9.3E-04	1.9E-04
4,4'-DDT	0.38	4.8E-05	1.0	0.28	1.2E-06	***4.9E-05***	0.72	3.2E-06	4.13	1.0	8.6E-03	1.6E+00	7.9E+00	5.4E-03	1.1E-03
Aldrin	0.38	2.3E-05	1.0	0.28	6.0E-07	***2.5E-05***	0.72	1.6E-06	4.13	1.0	4.6E-04	1.4E-01	7.0E-01	3.3E-03	6.6E-04
alpha-BHC	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.6E-06	4.13	1.0	5.2E-04	1.1E-02	1.1E-01	4.6E-02	4.6E-03
alpha-Chlordane	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.6E-06	4.13	1.0	5.1E-04	2.0E+00	3.9E+00	2.6E-04	1.3E-04
beta-BHC	0.38	2.3E-05	1.0	0.28	6.0E-07	***2.5E-05***	0.72	1.6E-06	4.13	1.0	5.4E-03	2.8E-01	1.4E+00	1.9E-02	3.9E-03
delta-BHC	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.6E-06	4.13	1.0	4.5E-04	1.1E-02	1.1E-01	4.0E-02	4.0E-03
Dieldrin	0.38	4.1E-05	1.0	0.28	1.0E-06	***4.9E-05***	0.72	3.2E-06	4.13	1.0	2.4E-03	2.3E-02	2.3E-01	1.1E-01	1.1E-02
Endosulfan I	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.6E-06	4.13	1.0	4.6E-04	4.9E-02	4.9E-01	9.4E-03	9.4E-04
Endosulfan II	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***4.9E-05***	0.72	3.2E-06	4.13	1.0	1.6E-03	4.9E-02	4.9E-01	3.3E-02	3.3E-03
Endosulfan Sulfate	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***4.9E-05***	0.72	3.2E-06	4.13	1.0	8.9E-04	4.9E-02	4.9E-01	1.8E-02	1.8E-03
Endrin	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***4.9E-05***	0.72	3.2E-06	4.13	1.0	2.6E-03	7.8E-02	7.8E-01	3.3E-02	3.3E-03
Endrin Aldehyde	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***4.9E-05***	0.72	3.2E-06	4.13	1.0	9.5E-04	7.8E-02	7.8E-01	1.2E-02	1.2E-03
Endrin Ketone	0.38	***5.0E-05***	1.0	0.28	1.3E-06	***4.9E-05***	0.72	3.2E-06	4.13	1.0	9.3E-04	7.8E-02	7.8E-01	1.2E-02	1.2E-03
gamma-BHC (Lindane)	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.6E-06	4.13	1.0	1.7E-03	3.0E+00	3.0E+01	5.8E-04	5.8E-05
gamma-Chlordane	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.6E-06	4.13	1.0	1.0E-03	2.0E+00	3.9E+00	5.2E-04	2.6E-04
Heptachlor	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.6E-06	4.13	1.0	5.5E-04	1.1E-01	1.1E+00	4.8E-03	4.8E-04
Heptachlor Epoxide	0.38	***2.5E-05***	1.0	0.28	6.4E-07	***2.5E-05***	0.72	1.6E-06	4.13	1.0	4.9E-04	1.6E-03	1.1E-02	3.2E-01	4.3E-02
Methoxychlor	0.38	***2.5E-04***	1.0	0.28	6.4E-06	***2.5E-04***	0.72	1.6E-05	4.13	1.0	4.3E-03	7.1E+00	1.4E+01	6.0E-04	3.0E-04
Toxaphene	0.38	***2.5E-03***	1.0	0.28	6.4E-05	***2.5E-03***	0.72	1.6E-04	4.13	1.0	4.7E-02	8.1E+00	8.1E+01	5.8E-03	5.8E-04
Herbicides															
2,4-D	0.38	***2.5E-04***	1.0	0.28	6.4E-06	***2.5E-04***	0.72	1.6E-05	4.13	1.0	5.6E-03	6.0E-01	3.0E+00	9.4E-03	1.9E-03
2,4-DB	0.38	***2.5E-04***	1.0	0.28	6.4E-06	***2.5E-04***	0.72	1.6E-05	4.13	1.0	4.8E-03	9.8E-01	3.1E+00	4.8E-03	1.5E-03
2,4,5-T	0.38	***2.5E-04***	1.0	0.28	6.4E-06	***2.5E-04***	0.72	1.6E-05	4.13	1.0	5.3E-03	2.6E+00	8.6E+00	2.1E-03	6.2E-04
2,4,5-TP (Silvex)	0.38	***2.5E-04***	1.0	0.28	6.4E-06	***2.5E-04***	0.72	1.6E-05	4.13	1.0	2.8E-03	8.0E-01	2.7E+00	3.5E-03	1.0E-03
Dalapon	0.38	***6.0E-02***	1.0	0.28	1.5E-03	***4.9E-03***	0.72	3.2E-04	4.13	1.0	3.2E-01	7.2E+00	2.5E+01	4.4E-02	1.3E-02
Dicamba	0.38	***6.0E-04***	1.0	0.28	1.5E-05	***2.5E-04***	0.72	1.6E-05	4.13	1.0	4.2E-03	2.8E+00	9.2E+00	1.5E-03	4.5E-04
Dichlorprop	0.38	***3.0E-03***	1.0	0.28	7.7E-05	1.1E-04	0.72	7.3E-06	4.13	1.0	3.2E-02	1.5E-01	1.5E+00	2.1E-01	2.1E-02
Dinoseb	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***4.8E-03***	0.72	3.2E-04	4.13	1.0	3.5E-02	8.6E-02	8.6E-01	4.1E-01	4.1E-02
MCPA	0.38	***6.0E-02***	1.0	0.28	1.5E-03	***6.0E-02***	0.72	4.0E-03	4.13	1.0	1.3E+00	1.6E-01	8.0E-01	8.4E+00	1.7E+00
MCPP	0.38	***6.0E-02***	1.0	0.28	1.5E-03	***6.0E-02***	0.72	4.0E-03	4.13	1.0	6.8E-01	2.6E-01	7.7E-01	2.7E+00	8.9E-01
PCBs															
Total PCBs	0.38	2.3E-04	1.0	0.28	5.9E-06	NA	0.72	NA	4.13	1.0	4.3E-01	8.6E-02	8.6E-01	5.0E+00	5.0E-01
Dioxins/Furans (f)															
TEQ	0.38	8.1E-09	1.0	0.28	2.1E-10	NA	0.72	NA	4.13	1.0	1.8E-05	8.6E-07	8.6E-06	2.1E+01	2.1E+00
Metals															
Aluminum	0.38	1.1E+00	1.0	0.28	2.7E-02	***1.0E-01***	0.72	6.6E-03	4.13	1.0	7.0E+01	1.4E+00	1.4E+01	4.9E+01	4.9E+00
Antimony	0.38	***8.3E-03***	1.0	0.28	2.1E-04	***1.0E-02***	0.72	6.6E-04	4.13	1.0	6.0E-02	9.3E-02	9.3E-01	6.4E-01	6.4E-02
Arsenic	0.38	5.1E-03	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	1.8E-01	6.7E-02	6.7E-01	2.8E+00	2.8E-01
Barium	0.38	1.4E-01	1.0	0.28	3.6E-03	6.6E-02	0.72	4.3E-03	4.13	1.0	2.6E+00	2.7E+00	1.0E+01	9.7E-01	2.5E-01
Beryllium	0.38	***2.0E-03***	1.0	0.28	5.2E-05	***2.0E-03***	0.72	1.3E-04	4.13	1.0	1.3E-02	5.7E-01	5.7E+00	2.3E-02	2.3E-03
Cadmium	0.38	2.3E-03	1.0	0.28	5.8E-05	***2.5E-03***	0.72	1.7E-04	4.13	1.0	1.0E+00	2.4E-01	2.4E+00	4.4E+00	4.4E-01
Chromium	0.38	5.1E-03	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.1E-01	2.8E+00	1.1E+01	1.1E-01	2.8E-02
Cobalt	0.38	5.5E-03	1.0	0.28	1.4E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	1.1E-01	4.3E-02	4.3E-01	2.5E+00	2.5E-01
Copper	0.38	7.3E-03	1.0	0.28	1.9E-04	***1.8E-03***	0.72	1.2E-04	4.13	1.0	1.7E+00	1.1E+01	1.4E+01	1.6E-01	1.2E-01
Lead	0.38	4.0E-03	1.0	0.28	1.0E-04	***2.5E-03***	0.72	1.7E-04	4.13	1.0	2.2E+00	6.9E+00	6.9E+01	3.2E-01	3.2E-02
Manganese	0.38	1.1E-01	1.0	0.28	2.8E-03	***5.0E-03***	0.72	3.3E-04	4.13	1.0	4.5E+00	7.5E+01	2.4E+02	6.0E-02	1.8E-02
Mercury	0.38	9.7E-05	1.0	0.28	2.5E-06	***1.0E-04***	0.72	6.6E-06	4.13	1.0	8.7E-02	8.8E-03	1.5E-02	9.9E+00	5.9E+00
Nickel	0.38	1.4E-02	1.0	0.28	3.7E-04	***2.0E-02***	0.72	1.3E-03	4.13	1.0	3.6E-01	3.4E+01	6.9E+01	1.0E-02	5.2E-03
Selenium	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	4.3E-02	2.1E-01	3.4E-01	2.1E-01	1.2E-01
Silver	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***5.0E-03***	0.72	3.3E-04	4.13	1.0	3.3E-02	1.3E-01	1.3E+00	2.4E-01	2.4E-02
Thallium	0.38	***5.0E-03***	1.0	0.28	1.3E-04	***1.3E-02***	0.72	8.3E-04	4.13	1.0	3.0E-02	4.5E-03	4.5E-02	6.6E+00	6.6E-01
Vanadium	0.38	5.7E-03	1.0	0.28	1.5E-04	2.2E-03	0.72	1.4E-04	4.13	1.0	2.7E-01	3.5E-01	3.5E+00	7.7E-01	7.7E-02
Zinc	0.38	2.2E-02	1.0	0.28	5.5E-04	***3.1E-03***	0.72	2.0E-04	4.13	1.0	7.7E+00	1.1E+02	2.2E+02	7.1E-02	3.5E-02

NOTES:
(a) - Values and references for them are presented in Section 12.7.6.1 of the Risk Assessment Workplan.
(b) - Values for the shrew were obtained by multiplying the mean site-wide average daily dose (ADD) concentrations for the shrew by a factor of 1.0 to account for bioaccumulation but not biomagnification.
Values for the vole were obtained by multiplying the mean site-wide plant concentrations by their plant-to-herbivorous mammal (deer mouse) bioconcentration factor (BCF). If a BCF was not available for the compound, then the vole ADD was used as
(c) - The dietary percentage of the shrew and vole were calculated by taking the dietary percentage of mammals for the fox (0.688) and dividing it by two. This assumes the fox will eat an equal amount of shrews and voles.
(d) - The dietary percentage of the pond water and river water were calculated by dividing the total length of the perimeters for Large and Small Pond by the total length of the river front adjacent to the Site.
i.e. Small Pond = 1,375 ft; Large Pond = 2,770 ft; River = 14,956 ft so: % for pond water ingestion = (1,375+2,770)/14956 = 0.28.
(e) - See Table III-C1.
(f) - Dioxins/furans were not analyzed for the A-Line surface water samples. The B-Line sample values for dioxins/furans were used instead.

* Calcium, Iron, Magnesium, Potassium and Sodium were not included in the model equations as they are considered to be essential nutrients.

NOAEL - No Observable Adverse Effects Level.
LOAEL - Lowest Observable Adverse Effects Level.
HQ - Hazard Quotient.
Bolded/Italicized values indicate either a maximum concentration based on non-detected values or a mean/95% UCL based entirely on non-detected values. (For the concentrations within the shrew and vole, the modeled values based on non-detects from all matr
A shaded cell indicates an HQ of equal to or greater than 1.0.

Table 7-60
COPECs for Site Based on Red Fox
Sauget, IL

Red Fox Modeling HQs (Average Conc. Based on 2002 River data)	Red Fox Modeling HQs (Average Conc. Based on 2007 River data)
PCBs (NOAEL only)	PCBs (NOAEL only)
Dioxins/furans	Dioxins/furans
Aluminum	Aluminum
Arsenic (NOAEL only)	Arsenic (NOAEL only)
Cadmium (NOAEL only)	Cadmium (NOAEL only)
Cobalt (NOAEL only)	Cobalt (NOAEL only)
Mercury	Mercury
Thallium (NOAEL only)	Thallium (NOAEL only)

NOTES:
Analytes listed are only for those exceeding their benchmark/TRV, based on detected values, and were above the background values.

Table 7-61
Large Pond Sediment Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. P11S					Sample No. P12S (Dupe of P11S)					Sample No. LPond-S-1				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
VOCs (ug/kg)	**Acute**																
1,1,1-Trichloroethane	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
1,1,2,2-Tetrachloroethane	NC	NA	4.5	UJ		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
1,1,2-Trichloroethane	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
1,1-Dichloroethane	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
1,1-Dichloroethylene	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
1,2-Dichloroethane	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
1,2-Dichloroethene (total)	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	3.1	J		3.1	NC
1,2-Dichloropropane	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
2-Butanone (MEK)	NC	NA	20	J		20	NC	19	U		9.5	NC	25	J		25	NC
2-Hexanone	NC	NA	22	U		11	NC	19	U		9.5	NC	47	U		24	NC
4-Methyl-2-pentanone (MIBK)	NC	NA	22	U		11	NC	19	U		9.5	NC	47	U		24	NC
Acetone	NC	NA	2900	J		2900	NC	38	U		19	NC	94	U		47	NC
Benzene	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
Bromodichloromethane	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
Bromoform	NC	NA	4.5	UJ		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
Bromomethane	NC	NA	9.0	UJ		4.5	NC	7.6	UJ		3.8	NC	9.4	U		4.7	NC
Carbon Disulfide	NC	NA	4.5	U	NA	2.3	NC	3.8	U	NA	1.9	NC	0.81	J	NA	0.81	NC
Carbon Tetrachloride	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
Chlorobenzene	NC	NA	4.5	UJ		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
Chloroethane	NC	NA	9.0	U		4.5	NC	7.6	U		3.8	NC	9.4	UJ		4.7	NC
Chloroform	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
Chloromethane	NC	NA	9.0	UJ		4.5	NC	7.6	UJ		3.8	NC	9.4	U		4.7	NC
cis-1,3-Dichloropropene	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
Dibromochloromethane	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
Ethylbenzene	NC	NA	4.5	UJ		2.3	NC	2.3	J		2.3	NC	2.6	J		2.6	NC
Methylene Chloride	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
Styrene (Monomer)	NC	NA	4.5	UJ		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
Tetrachloroethene	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
Toluene	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	3.3	J		3.3	NC
trans-1,3-Dichloropropene	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	9.4	U		4.7	NC
Trichloroethylene	NC	NA	4.5	U		2.3	NC	3.8	U		1.9	NC	3	J		3.0	NC
Vinyl chloride	NC	NA	9.0	U		4.5	NC	7.6	U		3.8	NC	9.4	U		4.7	NC
Xylenes, Total	NC	NA	6.8	J		6.8	NC	13			13	NC	19	U		9.5	NC
SVOCs (ug/kg)																	
1,2,4-Trichlorobenzene	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
1,2-Dichlorobenzene	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
1,3-Dichlorobenzene	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
1,4-Dichlorobenzene	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
2,2'-Oxybis(1-Chloropropane)	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
2,4,5-Trichlorophenol	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
2,4,6-Trichlorophenol	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
2,4-Dichlorophenol	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
2,4-Dimethylphenol	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
2,4-Dinitrophenol	NC	NA	3600	UJ		1800	NC	3600	UJ		1800	NC	35000	U		17500	NC
2,4-Dinitrotoluene	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
2,6-Dinitrotoluene	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
2-Chloronaphthalene	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
2-Chlorophenol	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
2-Methylnaphthalene	201	b	700	U		350	***1.7E+00***	700	U		350	***1.7E+00***	6700	U		3350	***1.7E+01***
2-Methylphenol (o-Cresol)	NC	NA	700	U	NA	350	NC	700	U	NA	350	NC	6700	U	NA	3350	NC
2-Nitroaniline	NC	NA	3600	UJ		1800	NC	3600	UJ		1800	NC	35000	U		17500	NC
2-Nitrophenol	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
3,3'-Dichlorobenzidine	NC	NA	1400	U		700	NC	1400	U		700	NC	13000	U		6500	NC
3/4-Methylphenol (m&p-Cresol)	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
3-Nitroaniline	NC	NA	3600	UJ		1800	NC	3600	UJ		1800	NC	35000	U		17500	NC
4,6-Dinitro-2-methylphenol	NC	NA	3600	U		1800	NC	3600	U		1800	NC	35000	U		17500	NC
4-Bromophenyl Phenyl Ether	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
4-Chloro-3-methylphenol	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
4-Chloroaniline	NC	NA	1400	U		700	NC	1400	U		700	NC	13000	U		6500	NC
4-Chlorophenyl Phenyl Ether	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
4-Nitroaniline	NC	NA	3600	U		1800	NC	3600	U		1800	NC	35000	U		17500	NC
4-Nitrophenol	NC	NA	3600	U		1800	NC	3600	U		1800	NC	35000	U		17500	NC
Acenaphthene	89	b	700	U		350	***3.9E+00***	700	U		350	***3.9E+00***	6700	U		3350	***3.8E+01***
Acenaphthylene	128	b	700	U		350	***2.7E+00***	700	U		350	***2.7E+00***	6700	U		3350	***2.6E+01***
Anthracene	37000	a	700	U		350	9.5E-03	700	U		350	9.5E-03	6700	U		3350	9.1E-02

NOTES:
a = SEL (Persaud *et al* ., 1993) (SELs were TOC-normalized. TOC for pond sediment was 18%, therefore the SELs were TOC-normalized to the recommended 10% maximum)
b = PEL (Smith *et al* ., 1996)
c = ER-M (Long *et al* ., 1995)
d = Ecological Screening Level (USEPA Region 5, 2003)
e - Ontario Severe Sediment Screening Benchmark
NC = No appropriate sediment screening value available, therefore the hazard quotient could not be calculated
NA = Not applicable

NR = Not analyzed
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined, therefore the hazard quotient could not be calculated.
Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-61
Large Pond Sediment Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. P11S					Sample No. P12S (Dupe of P11S)					Sample No. LPond-S-1				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
SVOCs (ug/kg)	**Acute**																
Benzo(a)anthracene	148000	a	700	U		350	2.4E-03	700	U		350	2.4E-03	6700	U		3350	2.3E-02
Benzo(a)pyrene	144000	a	700	U		350	2.4E-03	700	U		350	2.4E-03	6700	U		3350	2.3E-02
Benzo(b)fluoranthene	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
Benzo(g,h,i)perylene	32000	a	700	U		350	1.1E-02	700	U		350	1.1E-02	6700	U		3350	1.0E-01
Benzo(k)fluoranthene	134000	a	700	U		350	2.6E-03	700	U		350	2.6E-03	6700	U		3350	2.5E-02
bis(2-Chloroethoxy)methane	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
bis(2-Chloroethyl)ether	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
bis(2-Ethylhexyl)phthalate	182	d	700	U		350	***1.9E+00***	700	U		350	***1.9E+00***	630	J		630	**3.5E+00**
Butyl Benzyl Phthalate	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
Carbazole	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
Chrysene	46000	a	700	U		350	7.6E-03	700	U		350	7.6E-03	6700	U		3350	7.3E-02
Dibenzo(a,h)anthracene	13000	a	700	U		350	2.7E-02	700	U		350	2.7E-02	6700	U		3350	2.6E-01
Dibenzofuran	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
Diethyl Phthalate	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
Dimethyl Phthalate	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
Di-n-butylphthalate	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
Di-n-octylphthalate	NC	NA	700	U	NA	350	NC	700	U	NA	350	NC	6700	U	NA	3350	NC
Fluoranthene	102000	a	700	U		350	3.4E-03	700	U		350	3.4E-03	6700	U		3350	3.3E-02
Fluorene	16000	a	700	U		350	2.2E-02	700	U		350	2.2E-02	6700	U		3350	2.1E-01
Hexachlorobenzene	2400	a	700	U		350	1.5E-01	700	U		350	1.5E-01	6700	U		3350	***1.4E+00***
Hexachlorobutadiene	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
Hexachlorocyclopentadiene	NC	NA	700	UJ		350	NC	700	UJ		350	NC	6700	U		3350	NC
Hexachloroethane	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
Indeno(1,2,3-cd)pyrene	32000	a	700	U		350	1.1E-02	700	U		350	1.1E-02	6700	U		3350	1.0E-01
Isophorone	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
Naphthalene	391	b	700	U		350	9.0E-01	700	U		350	9.0E-01	6700	U		3350	***8.6E+00***
Nitrobenzene	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
N-Nitroso-di-n-propylamine	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
N-Nitrosodiphenylamine	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
Pentachlorophenol	NC	NA	R	R		R	NA	2.5	J		2.5	NC	1.8	J		1.8	NC
Phenanthrene	95000	a	700	U		350	3.7E-03	700	U		350	3.7E-03	6700	U		3350	3.5E-02
Phenol	NC	NA	700	U		350	NC	700	U		350	NC	6700	U		3350	NC
Pyrene	85000	a	700	U		350	4.1E-03	700	U		350	4.1E-03	6700	U		3350	3.9E-02
Pesticides (ug/kg)																	
4,4'-DDD	600	a	7.0	UJ		3.5	5.8E-03	7.0	UJ		3.5	5.8E-03	340	UJ		170	2.8E-01
4,4'-DDE	1900	a	7.0	U		3.5	1.8E-03	7.0	U		3.5	1.8E-03	340	UJ		170	8.9E-02
4,4'-DDT	7100	a	R	R		R	NA	57	J		57	8.0E-03	340	UJ		170	2.4E-02
Aldrin	800	a	3.6	U		1.8	2.3E-03	3.6	U		1.8	2.3E-03	170	UJ		85	1.1E-01
alpha-BHC	1000	a	3.6	U		1.8	1.8E-03	3.6	U		1.8	1.8E-03	170	UJ		85	8.5E-02
alpha-Chlordane	NC	NA	3.6	U		1.8	NC	3.6	U		1.8	NC	170	UJ		85	NC
beta-BHC	2100	a	3.6	U		1.8	8.6E-04	3.6	U		1.8	8.6E-04	170	UJ		85	4.0E-02
delta-BHC	NC	NA	3.6	U		1.8	NC	3.6	U		1.8	NC	170	UJ		85	NC
Dieldrin	9100	a	7.0	U		3.5	3.8E-04	7.0	U		3.5	3.8E-04	340	UJ		170	1.9E-02
Endosulfan I	NC	NA	3.6	U		1.8	NC	3.6	U		1.8	NC	170	UJ		85	NC
Endosulfan II	NC	NA	7.0	U	NA	3.5	NC	7.0	U	NA	3.5	NC	340	UJ	NA	170	NC
Endosulfan Sulfate	NC	NA	7.0	U		3.5	NC	7.0	U		3.5	NC	340	UJ		170	NC
Endrin	13000	a	7.0	U		3.5	2.7E-04	7.0	U		3.5	2.7E-04	340	UJ		170	1.3E-02
Endrin Aldehyde	NC	NA	7.0	U		3.5	NC	7.0	U		3.5	NC	340	UJ		170	NC
Endrin Ketone	NC	NA	7.0	UJ		3.5	NC	7.0	UJ		3.5	NC	31	J		31	NC
gamma-BHC (Lindane)	100	a	3.6	U		1.8	1.8E-02	3.6	U		1.8	1.8E-02	53	J		53	5.3E-01
gamma-Chlordane	NC	NA	3.6	U		1.8	NC	3.6	U		1.8	NC	170	UJ		85	NC
Heptachlor	NC	NA	3.6	UJ		1.8	NC	3.6	UJ		1.8	NC	170	UJ		85	NC
Heptachlor Epoxide	500	a	3.6	U		1.8	3.6E-03	3.6	U		1.8	3.6E-03	170	UJ		85	1.7E-01
Methoxychlor	NC	NA	36	UJ		18	NC	36	UJ		18	NC	1700	UJ		850	NC
Toxaphene	NC	NA	360	U		180	NC	360	U		180	NC	17000	UJ		8500	NC
Herbicides (ug/kg)																	
2,4-D	NC	NA	R	R		R	NA	18	R		R	NA	17	U		8.5	NC
2,4-DB	NC	NA	R	R		R	NA	18	R		R	NA	17	U		8.5	NC
2,4,5-T	NC	NA	R	R		R	NA	18	R		R	NA	17	U		8.5	NC
2,4,5-TP (Silvex)	NC	NA	R	R		R	NA	18	R		R	NA	17	U		8.5	NC
Dalapon	NC	NA	R	R	NA	R	NA	4200	R	NA	R	NA	4100	U	NA	2050	NC
Dicamba	NC	NA	R	R		R	NA	42	R		R	NA	41	U		21	NC
Dichlorprop	NC	NA	R	R		R	NA	3.7	J		3.7	NC	200	U		100	NC
Dinoseb	NC	NA	700	UJ		350	NC	700	UJ		350	NC	6700	U		3350	NC
MCPA	NC	NA	R	R		R	NA	4200	R		R	NA	4100	U		2050	NC
MCPP	NC	NA	R	R		R	NA	630	J		630	NC	4100	U		2050	NC

NOTES:
a = SEL (Persaud *et al* ., 1993) (SELs were TOC-normalized. TOC for pond sediment was 18%, therefore the SELs were TOC-normalized to the recommended 10% maximum)
b = PEL (Smith *et al* ., 1996)
c = ER-M (Long *et al* ., 1995)
d = Ecological Screening Level (USEPA Region 5, 2003)
e - Ontario Severe Sediment Screening Benchmark
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U = Not detected at the MDL.
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R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined, therefore the hazard quotient could not be calculated.
Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-61
Large Pond Sediment Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. P11S					Sample No. P12S (Dupe of P11S)					Sample No. LPond-S-1				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
PCBs (ug/kg)	**Acute**																
Total PCBs	53000	a	1159		NA	1159	2.2E-02	175		NA	175	3.3E-03	35530		NA	35530	6.7E-01
Dioxins/Furans (ug/kg)																	
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.022	b	2.2	J	0.0010	0.0022	1.0E-01	NR		0.0010	NA	NA	NR		0.0010	NA	NA
1,2,3,4,6,7,8-HpCDF	0.022	b	0.31	J	0.010	0.0031	1.4E-01	NR		0.010	NA	NA	NR		0.010	NA	NA
1,2,3,4,7,8,9-HpCDF	0.022	b	0.023	J	0.010	0.00023	1.1E-02	NR		0.010	NA	NA	NR		0.010	NA	NA
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.022	b	0.0086	J	0.50	0.0043	2.0E-01	NR		0.50	NA	NA	NR		0.50	NA	NA
1,2,3,4,7,8-HxCDF	0.022	b	0.032	J	0.10	0.0032	1.5E-01	NR		0.10	NA	NA	NR		0.10	NA	NA
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.022	b	0.065	J	0.010	0.00065	3.0E-02	NR		0.010	NA	NA	NR		0.010	NA	NA
1,2,3,6,7,8-HxCDF	0.022	b	0.018	J	0.10	0.0018	8.4E-02	NR		0.10	NA	NA	NR		0.10	NA	NA
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.022	b	0.023	J	0.010	0.00023	1.1E-02	NR		0.010	NA	NA	NR		0.010	NA	NA
1,2,3,7,8,9-HxCDF	0.022	b	0.0035	UJ	0.10	0.00018	8.1E-03	NR		0.10	NA	NA	NR		0.10	NA	NA
1,2,3,7,8-Pentachlorodibenzofuran	0.022	b	0.025	J	0.050	0.0013	5.8E-02	NR		0.050	NA	NA	NR		0.050	NA	NA
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.022	b	0.0045	UJ	1.0	0.0023	1.0E-01	NR		1.0	NA	NA	NR		1.0	NA	NA
2,3,4,6,7,8-HxCDF	0.022	b	0.019	J	0.10	0.0019	8.8E-02	NR		0.10	NA	NA	NR		0.10	NA	NA
2,3,4,7,8-PeCDF	0.022	b	0.050	J	0.50	0.025	**1.2E+00**	NR		0.50	NA	NA	NR		0.50	NA	NA
2,3,7,8-TCDD	0.022	b	0.0072	J	1.0	0.0072	3.3E-01	NR		1.0	NA	NA	NR		1.0	NA	NA
2,3,7,8-Tetrachlorodibenzofuran	0.022	b	0.11	J	0.050	0.0055	2.6E-01	NR		0.050	NA	NA	NR		0.050	NA	NA
OCDD	0.022	b	26	J	0.00010	0.0026	1.2E-01	NR		0.00010	NA	NA	NR		0.00010	NA	NA
OCDF	0.022	b	1.3	J	0.00010	0.00013	6.0E-03	NR		0.00010	NA	NA	NR		0.00010	NA	NA
Total HpCDD	0.022	b	4.3	J	0.0010	0.0043	2.0E-01	NR		0.0010	NA	NA	NR		0.0010	NA	NA
Total HpCDF	0.022	b	1.4	J	0.010	0.014	6.5E-01	NR		0.010	NA	NA	NR		0.010	NA	NA
Total HxCDD	0.022	b	0.39	J	0.50	0.20	**9.1E+00**	NR		0.50	NA	NA	NR		0.50	NA	NA
Total HxCDF	0.022	b	0.75	J	0.10	0.075	**3.5E+00**	NR		0.10	NA	NA	NR		0.10	NA	NA
Total PeCDD	0.022	b	0.10	J	1.0	0.10	**4.7E+00**	NR		1.0	NA	NA	NR		1.0	NA	NA
Total PeCDF	0.022	b	0.46	J	0.50	0.23	**1.1E+01**	NR		0.50	NA	NA	NR		0.50	NA	NA
Total TCDD	0.022	b	0.085	J	1.0	0.085	**4.0E+00**	NR		1.0	NA	NA	NR		1.0	NA	NA
Total TCDF	0.022	b	0.86	J	0.050	0.043	**2.0E+00**	NR		0.050	NA	NA	NR		0.050	NA	NA
Metals (mg/kg)																	
Aluminum	NC	NA	11000			11000	NC	14000			14000	NC	14000			14000	NC
Antimony	25	c	3.9	UJ		2.0	7.8E-02	4.3	U		2.15	8.6E-02	2.7	J		2.7	1.1E-01
Arsenic	33	a	5.2			5.2	1.6E-01	7.3			7.3	2.2E-01	6.4	J		6.4	1.9E-01
Barium	NC	NA	200			200	NC	260			260	NC	370			370	NC
Beryllium	NC	NA	0.77	J		0.77	NC	0.93			0.93	NC	0.98			0.98	NC
Cadmium	10	a	1.3			1.3	1.3E-01	1.7			1.7	1.7E-01	13			13	**1.3E+00**
Calcium	NC	NA	13000			13000	NC	16000			16000	NC	14000			14000	NC
Chromium	110	a	19			19	1.7E-01	24			24	2.2E-01	79			79	7.2E-01
Cobalt	NC	NA	8.8			8.8	NC	11			11	NC	12			12	NC
Copper	110	a	30			30	2.7E-01	39			39	3.5E-01	88			88	8.0E-01
Iron	40000	e	20000			20000	5.0E-01	25000			25000	6.3E-01	24000			24000	6.0E-01
Lead	250	a	43		NA	43	1.7E-01	53		NA	53	2.1E-01	320		NA	320	**1.3E+00**
Magnesium	NC	NA	4200			4200	NC	5500			5500	NC	4500			4500	NC
Manganese	1100	e	610			610	5.5E-01	770			770	7.0E-01	460			460	4.2E-01
Mercury	2.0	a	0.13			0.13	6.5E-02	0.13			0.13	6.5E-02	0.87			0.87	4.4E-01
Nickel	75	a	21			21	2.8E-01	28			28	3.7E-01	31	J		31	4.1E-01
Potassium	NC	NA	1600			1600	NC	2000			2000	NC	1700	J		1700	NC
Selenium	NC	NA	1.9	U		0.95	NC	1.9	U		0.95	NC	2.4			2.4	NC
Silver	3.7	c	1.9	UJ		0.95	2.6E-01	2.1	UJ		1.1	2.8E-01	0.52			0.52	1.4E-01
Sodium	NC	NA	87	J		87	NC	110			110	NC	88			88	NC
Thallium	NC	NA	1.9	U		0.95	NC	1.9	U		0.95	NC	1.9	U		0.95	NC
Vanadium	NC	NA	29			29	NC	38			38	NC	36			36	NC
Zinc	820	a	190	J		190	2.3E-01	240	J		240	2.9E-01	380	J		380	4.6E-01

NOTES:
a = SEL (Persaud *et al* ., 1993) (SELs were TOC-normalized. TOC for pond sediment was 18%, therefore the SELs were TOC-normalized to the recommended 10% maximum)
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Table 7-61
Large Pond Sediment Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. LPond-S-2					Sample No. LPond-S-3				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
VOCs (ug/kg)	**Acute**											
1,1,1-Trichloroethane	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
1,1,2,2-Tetrachloroethane	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
1,1,2-Trichloroethane	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
1,1-Dichloroethane	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
1,1-Dichloroethylene	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
1,2-Dichloroethane	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
1,2-Dichloroethene (total)	NC	NA	14	U		7.0	NC	15	U		7.5	NC
1,2-Dichloropropane	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
2-Butanone (MEK)	NC	NA	35	U		18	NC	18	J		18	NC
2-Hexanone	NC	NA	35	U		18	NC	38	U		19	NC
4-Methyl-2-pentanone (MIBK)	NC	NA	35	U		18	NC	38	U		19	NC
Acetone	NC	NA	70	U		35	NC	14	J		14	NC
Benzene	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Bromodichloromethane	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Bromoform	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Bromomethane	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Carbon Disulfide	NC	NA	7.0	U	NA	3.5	NC	7.6	U	NA	3.8	NC
Carbon Tetrachloride	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Chlorobenzene	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Chloroethane	NC	NA	7.0	UJ		3.5	NC	7.6	UJ		3.8	NC
Chloroform	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Chloromethane	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
cis-1,3-Dichloropropene	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Dibromochloromethane	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Ethylbenzene	NC	NA	0.82	J		0.82	NC	0.90	J		0.90	NC
Methylene Chloride	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Styrene (Monomer)	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Tetrachloroethene	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Toluene	NC	NA	1.1	J		1.1	NC	1.0	J		1.0	NC
trans-1,3-Dichloropropene	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Trichloroethylene	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Vinyl chloride	NC	NA	7.0	U		3.5	NC	7.6	U		3.8	NC
Xylenes, Total	NC	NA	14	U		7.0	NC	15	U		7.5	NC
SVOCs (ug/kg)												
1,2,4-Trichlorobenzene	NC	NA	4700	U		2350	NC	5000	U		2500	NC
1,2-Dichlorobenzene	NC	NA	4700	U		2350	NC	5000	U		2500	NC
1,3-Dichlorobenzene	NC	NA	4700	U		2350	NC	5000	U		2500	NC
1,4-Dichlorobenzene	NC	NA	4700	U		2350	NC	5000	U		2500	NC
2,2'-Oxybis(1-Chloropropane)	NC	NA	4700	U		2350	NC	5000	U		2500	NC
2,4,5-Trichlorophenol	NC	NA	4700	U		2350	NC	5000	U		2500	NC
2,4,6-Trichlorophenol	NC	NA	4700	U		2350	NC	5000	U		2500	NC
2,4-Dichlorophenol	NC	NA	4700	U		2350	NC	5000	U		2500	NC
2,4-Dimethylphenol	NC	NA	4700	U		2350	NC	5000	U		2500	NC
2,4-Dinitrophenol	NC	NA	24000	U		12000	NC	26000	U		13000	NC
2,4-Dinitrotoluene	NC	NA	4700	U		2350	NC	5000	U		2500	NC
2,6-Dinitrotoluene	NC	NA	4700	U		2350	NC	5000	U		2500	NC
2-Chloronaphthalene	NC	NA	4700	U		2350	NC	5000	U		2500	NC
2-Chlorophenol	NC	NA	4700	U		2350	NC	5000	U		2500	NC
2-Methylnaphthalene	201	b	4700	U		2350	***1.2E+01***	5000	U		2500	***1.2E+01***
2-Methylphenol (o-Cresol)	NC	NA	4700	U	NA	2350	NC	5000	U	NA	2500	NC
2-Nitroaniline	NC	NA	24000	U		12000	NC	26000	U		13000	NC
2-Nitrophenol	NC	NA	4700	U		2350	NC	5000	U		2500	NC
3,3'-Dichlorobenzidine	NC	NA	9400	U		4700	NC	10000	U		5000	NC
3/4-Methylphenol (m&p-Cresol)	NC	NA	4700	U		2350	NC	5000	U		2500	NC
3-Nitroaniline	NC	NA	24000	U		12000	NC	26000	U		13000	NC
4,6-Dinitro-2-methylphenol	NC	NA	24000	U		12000	NC	26000	U		13000	NC
4-Bromophenyl Phenyl Ether	NC	NA	4700	U		2350	NC	5000	U		2500	NC
4-Chloro-3-methylphenol	NC	NA	4700	U		2350	NC	5000	U		2500	NC
4-Chloroaniline	NC	NA	9400	U		4700	NC	10000	U		5000	NC
4-Chlorophenyl Phenyl Ether	NC	NA	4700	U		2350	NC	5000	U		2500	NC
4-Nitroaniline	NC	NA	24000	U		12000	NC	26000	U		13000	NC
4-Nitrophenol	NC	NA	24000	U		12000	NC	26000	U		13000	NC
Acenaphthene	89	b	4700	U		2350	***2.6E+01***	5000	U		2500	***2.8E+01***
Acenaphthylene	128	b	4700	U		2350	***1.8E+01***	5000	U		2500	***2.0E+01***
Anthracene	37000	a	4700	U		2350	6.4E-02	5000	U		2500	6.8E-02

NOTES:
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Table 7-61
Large Pond Sediment Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. LPond-S-2					Sample No. LPond-S-3				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
SVOCs (ug/kg)	**Acute**											
Benzo(a)anthracene	148000	a	4700	U		2350	1.6E-02	5000	U		2500	1.7E-02
Benzo(a)pyrene	144000	a	4700	U		2350	1.6E-02	5000	U		2500	1.7E-02
Benzo(b)fluoranthene	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Benzo(g,h,i)perylene	32000	a	4700	U		2350	7.3E-02	5000	U		2500	7.8E-02
Benzo(k)fluoranthene	134000	a	4700	U		2350	1.8E-02	5000	U		2500	1.9E-02
bis(2-Chloroethoxy)methane	NC	NA	4700	U		2350	NC	5000	U		2500	NC
bis(2-Chloroethyl)ether	NC	NA	4700	U		2350	NC	5000	U		2500	NC
bis(2-Ethylhexyl)phthalate	182	d	4700	U		2350	***1.3E+01***	5000	U		2500	***1.4E+01***
Butyl Benzyl Phthalate	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Carbazole	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Chrysene	46000	a	4700	U		2350	5.1E-02	5000	U		2500	5.4E-02
Dibenzo(a,h)anthracene	13000	a	4700	U		2350	1.8E-01	5000	U		2500	1.9E-01
Dibenzofuran	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Diethyl Phthalate	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Dimethyl Phthalate	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Di-n-butylphthalate	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Di-n-octylphthalate	NC	NA	4700	U	NA	2350	NC	5000	U	NA	2500	NC
Fluoranthene	102000	a	4700	U		2350	2.3E-02	5000	U		2500	2.5E-02
Fluorene	16000	a	4700	U		2350	1.5E-01	5000	U		2500	1.6E-01
Hexachlorobenzene	2400	a	4700	U		2350	9.8E-01	5000	U		2500	***1.0E+00***
Hexachlorobutadiene	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Hexachlorocyclopentadiene	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Hexachloroethane	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Indeno(1,2,3-cd)pyrene	32000	a	4700	U		2350	7.3E-02	5000	U		2500	7.8E-02
Isophorone	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Naphthalene	391	b	4700	U		2350	***6.0E+00***	5000	U		2500	***6.4E+00***
Nitrobenzene	NC	NA	4700	U		2350	NC	5000	U		2500	NC
N-Nitroso-di-n-propylamine	NC	NA	4700	U		2350	NC	5000	U		2500	NC
N-Nitrosodiphenylamine	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Pentachlorophenol	NC	NA	24	U		12	NC	26	U		13	NC
Phenanthrene	95000	a	4700	U		2350	2.5E-02	5000	U		2500	2.6E-02
Phenol	NC	NA	4700	U		2350	NC	5000	U		2500	NC
Pyrene	85000	a	4700	U		2350	2.8E-02	5000	U		2500	2.9E-02
Pesticides (ug/kg)												
4,4'-DDD	600	a	94	UJ		47	7.8E-02	R	R		R	NA
4,4'-DDE	1900	a	94	UJ		47	2.5E-02	R	R		R	NA
4,4'-DDT	7100	a	94	UJ		47	6.6E-03	74	J		74	1.0E-02
Aldrin	800	a	48	UJ		24	3.0E-02	5.2	UJ		2.6	3.3E-03
alpha-BHC	1000	a	48	UJ		24	2.4E-02	5.2	UJ		2.6	2.6E-03
alpha-Chlordane	NC	NA	48	UJ		24	NC	R	R		R	NA
beta-BHC	2100	a	48	UJ		24	1.1E-02	5.2	UJ		2.6	1.2E-03
delta-BHC	NC	NA	48	UJ		24	NC	5.2	UJ		2.6	NC
Dieldrin	9100	a	94	UJ		47	5.2E-03	R	R		R	NA
Endosulfan I	NC	NA	48	UJ		24	NC	R	R		R	NA
Endosulfan II	NC	NA	94	UJ	NA	47	NC	10	UJ	NA	5.0	NC
Endosulfan Sulfate	NC	NA	94	UJ		47	NC	10	UJ		5.0	NC
Endrin	13000	a	94	UJ		47	3.6E-03	R	R		R	NA
Endrin Aldehyde	NC	NA	94	UJ		47	NC	10	UJ		5.0	NC
Endrin Ketone	NC	NA	94	UJ		47	NC	10	UJ		5.0	NC
gamma-BHC (Lindane)	100	a	48	UJ		24	2.4E-01	1.1	J		1.1	1.1E-02
gamma-Chlordane	NC	NA	48	UJ		24	NC	R	R		R	NA
Heptachlor	NC	NA	48	UJ		24	NC	5.2	UJ		2.6	NC
Heptachlor Epoxide	500	a	48	UJ		24	4.8E-02	5.2	UJ		2.6	5.2E-03
Methoxychlor	NC	NA	480	UJ		240	NC	52	UJ		26	NC
Toxaphene	NC	NA	4800	UJ		2400	NC	520	UJ		260	NC
Herbicides (ug/kg)												
2,4-D	NC	NA	12	U		6.0	NC	12	U		6.0	NC
2,4-DB	NC	NA	12	UJ		6.0	NC	12	U		6.0	NC
2,4,5-T	NC	NA	12	U		6.0	NC	12	U		6.0	NC
2,4,5-TP (Silvex)	NC	NA	12	U		6.0	NC	12	U		6.0	NC
Dalapon	NC	NA	2800	U	NA	1400	NC	3000	U	NA	1500	NC
Dicamba	NC	NA	28	U		14	NC	30	U		15	NC
Dichlorprop	NC	NA	140	U		70	NC	150	U		75	NC
Dinoseb	NC	NA	4700	U		2350	NC	5000	U		2500	NC
MCPA	NC	NA	2800	U		1400	NC	3000	U		1500	NC
MCPP	NC	NA	1600	J		1600	NC	3000	U		1500	NC

NOTES:
a = SEL (Persaud *et al* ., 1993) (SELs were TOC-normalized. TOC for pond sediment was 18%, therefore the SELs were TOC-normalized to the recommended 10% maximum)
b = PEL (Smith *et al* ., 1996)
c = ER-M (Long *et al* ., 1995)
d = Ecological Screening Level (USEPA Region 5, 2003)
e - Ontario Severe Sediment Screening Benchmark
NC = No appropriate sediment screening value available, therefore the hazard quotient could not be calculated
NA = Not applicable
NR = Not analyzed
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined, therefore the hazard quotient could not be calculated.
Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-61
Large Pond Sediment Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. LPond-S-2				Sample No. LPond-S-3			
			Unadjusted Concentration	TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration	TEF (where applicable)	Adjusted Concentration	Acute HQ
PCBs (ug/kg)	**Acute**									
Total PCBs	53000	a	1582	NA	1582	3.0E-02	436	NA	436	8.2E-03
Dioxins/Furans (ug/kg)										
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.022	b	NR	0.0010	NA	NA	3.7	0.0010	0.0037	1.7E-01
1,2,3,4,6,7,8-HpCDF	0.022	b	NR	0.010	NA	NA	0.31	0.010	0.0031	1.4E-01
1,2,3,4,7,8,9-HpCDF	0.022	b	NR	0.010	NA	NA	0.016	0.010	0.00016	7.4E-03
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.022	b	NR	0.50	NA	NA	0.0060 J	0.50	0.0030	1.4E-01
1,2,3,4,7,8-HxCDF	0.022	b	NR	0.10	NA	NA	0.019	0.10	0.0019	8.8E-02
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.022	b	NR	0.010	NA	NA	0.094	0.010	0.00094	4.4E-02
1,2,3,6,7,8-HxCDF	0.022	b	NR	0.10	NA	NA	0.010	0.10	0.0010	4.7E-02
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.022	b	NR	0.010	NA	NA	0.018	0.010	0.00018	8.4E-03
1,2,3,7,8,9-HxCDF	0.022	b	NR	0.10	NA	NA	0.00074 U	0.10	0.000037	1.7E-03
1,2,3,7,8-Pentachlorodibenzofuran	0.022	b	NR	0.050	NA	NA	0.011	0.050	0.00055	2.6E-02
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.022	b	NR	1.0	NA	NA	0.0046 J	1.0	0.0046	2.1E-01
2,3,4,6,7,8-HxCDF	0.022	b	NR	0.10	NA	NA	0.0086	0.10	0.00086	4.0E-02
2,3,4,7,8-PeCDF	0.022	b	NR	0.50	NA	NA	0.027	0.50	0.014	6.3E-01
2,3,7,8-TCDD	0.022	b	NR	1.0	NA	NA	0.013	1.0	0.013	6.0E-01
2,3,7,8-Tetrachlorodibenzofuran	0.022	b	NR	0.050	NA	NA	0.056	0.050	0.0028	1.3E-01
OCDD	0.022	b	NR	0.00010	NA	NA	34	0.00010	0.0034	1.6E-01
OCDF	0.022	b	NR	0.00010	NA	NA	1.8	0.00010	0.00018	8.4E-03
Total HpCDD	0.022	b	NR	0.0010	NA	NA	7.3	0.0010	0.0073	3.4E-01
Total HpCDF	0.022	b	NR	0.010	NA	NA	1.6	0.010	0.016	7.4E-01
Total HxCDD	0.022	b	NR	0.50	NA	NA	0.53	0.50	0.27	**1.2E+01**
Total HxCDF	0.022	b	NR	0.10	NA	NA	0.47	0.10	0.047	**2.2E+00**
Total PeCDD	0.022	b	NR	1.0	NA	NA	0.092	1.0	0.092	**4.3E+00**
Total PeCDF	0.022	b	NR	0.50	NA	NA	0.30	0.50	0.15	**7.0E+00**
Total TCDD	0.022	b	NR	1.0	NA	NA	0.10	1.0	0.10	**4.7E+00**
Total TCDF	0.022	b	NR	0.050	NA	NA	0.57	0.050	0.0285	**1.3E+00**
Metals (mg/kg)										
Aluminum	NC	NA	10000		10000	NC	8900		8900	NC
Antimony	25	c	2.6 J		2.6	1.E-01	1.2 J		1.2	4.8E-02
Arsenic	33	a	3.4 J		3.4	1.E-01	3.9 J		3.9	1.2E-01
Barium	NC	NA	170		170	NC	160		160	NC
Beryllium	NC	NA	0.76		0.76	NC	0.63		0.63	NC
Cadmium	10	a	2.1		2.1	2.E-01	1.1		1.1	1.1E-01
Calcium	NC	NA	8900		8900	NC	7600		7600	NC
Chromium	110	a	18		18	2.E-01	15		15	1.4E-01
Cobalt	NC	NA	8.5		8.5	NC	7.2		7.2	NC
Copper	110	a	32		32	3.E-01	22		22	2.0E-01
Iron	40000	e	17000		17000	4.E-01	15000		15000	3.8E-01
Lead	250	a	39	NA	39	2.E-01	29	NA	29	1.2E-01
Magnesium	NC	NA	4400		4400	NC	3300		3300	NC
Manganese	1100	e	340		340	3.E-01	400		400	3.6E-01
Mercury	2.0	a	1.0		1.0	5.E-01	0.064		0.064	3.2E-02
Nickel	75	a	20 J		20	3.E-01	18 J		18	2.4E-01
Potassium	NC	NA	1300 J		1300	NC	1200 J		1200	NC
Selenium	NC	NA	1.3 U		0.65	NC	1.5 U		0.75	NC
Silver	3.7	c	0.20		0.20	5.E-02	1.5 U		0.75	2.0E-01
Sodium	NC	NA	75		75	NC	65		65	NC
Thallium	NC	NA	1.3 U		0.65	NC	1.5 U		0.75	NC
Vanadium	NC	NA	28		28	NC	25		25	NC
Zinc	820	a	220 J		220	3.E-01	160 J		160	2.0E-01

NOTES:
a = SEL (Persaud *et al* ., 1993) (SELs were TOC-normalized. TOC for pond sediment was 18%, therefore the SELs were TOC-normalized to the recommended 10% maximum)
b = PEL (Smith *et al* ., 1996)
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Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-62
Small Pond Sediment Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. SPond-S-1					Sample No. SPond-S-2				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
VOCs (ug/kg)	**Acute**											
1,1,1-Trichloroethane	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
1,1,2,2-Tetrachloroethane	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
1,1,2-Trichloroethane	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
1,1-Dichloroethane	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
1,1-Dichloroethylene	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
1,2-Dichloroethane	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
1,2-Dichloroethene (total)	NC	NA	17	U		8.5	NC	14	U		7.0	NC
1,2-Dichloropropane	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
2-Butanone (MEK)	NC	NA	19	J		19	NC	17	J		17	NC
2-Hexanone	NC	NA	42	U		21	NC	36	U		18	NC
4-Methyl-2-pentanone (MIBK)	NC	NA	42	U		21	NC	36	U		18	NC
Acetone	NC	NA	12	J		12	NC	7.2	J		7.2	NC
Benzene	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Bromodichloromethane	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Bromoform	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Bromomethane	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Carbon Disulfide	NC	NA	0.76	J	NA	0.76	NC	7.1	U	NA	3.6	NC
Carbon Tetrachloride	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Chlorobenzene	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Chloroethane	NC	NA	8.3	UJ		4.2	NC	7.1	UJ		3.6	NC
Chloroform	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Chloromethane	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
cis-1,3-Dichloropropene	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Dibromochloromethane	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Ethylbenzene	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Methylene Chloride	NC	NA	8.4	U		4.2	NC	2.0	J		2.0	NC
Styrene (Monomer)	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Tetrachloroethene	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Toluene	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
trans-1,3-Dichloropropene	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Trichloroethylene	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Vinyl chloride	NC	NA	8.3	U		4.2	NC	7.1	U		3.6	NC
Xylenes, Total	NC	NA	17	U		8.5	NC	14	U		7.0	NC
SVOCs (ug/kg)												
1,2,4-Trichlorobenzene	NC	NA	560	UJ		280	NC	480	UJ		240	NC
1,2-Dichlorobenzene	NC	NA	560	UJ		280	NC	480	UJ		240	NC
1,3-Dichlorobenzene	NC	NA	560	UJ		280	NC	480	UJ		240	NC
1,4-Dichlorobenzene	NC	NA	560	UJ		280	NC	480	UJ		240	NC
2,2'-Oxybis(1-Chloropropane)	NC	NA	560	UJ		280	NC	480	UJ		240	NC
2,4,5-Trichlorophenol	NC	NA	560	UJ		280	NC	480	UJ		240	NC
2,4,6-Trichlorophenol	NC	NA	560	UJ		280	NC	480	UJ		240	NC
2,4-Dichlorophenol	NC	NA	560	UJ		280	NC	480	UJ		240	NC
2,4-Dimethylphenol	NC	NA	88	UJ		44	NC	480	UJ		240	NC
2,4-Dinitrophenol	NC	NA	2900	UJ		1450	NC	2500	UJ		1250	NC
2,4-Dinitrotoluene	NC	NA	560	UJ		280	NC	480	UJ		240	NC
2,6-Dinitrotoluene	NC	NA	560	UJ		280	NC	480	UJ		240	NC
2-Chloronaphthalene	NC	NA	560	UJ		280	NC	480	UJ		240	NC
2-Chlorophenol	NC	NA	560	UJ		280	NC	480	UJ		240	NC
2-Methylnaphthalene	201	b	560	UJ		280	***1.4E+00***	480	UJ		240	***1.2E+00***
2-Methylphenol (o-Cresol)	NC	NA	560	UJ	NA	280	NC	480	UJ	NA	240	NC
2-Nitroaniline	NC	NA	2900	UJ		1450	NC	2500	UJ		1250	NC
2-Nitrophenol	NC	NA	560	UJ		280	NC	480	UJ		240	NC
3,3'-Dichlorobenzidine	NC	NA	1100	U		550	NC	960	U		480	NC
3/4-Methylphenol (m&p-Cresol)	NC	NA	560	UJ		280	NC	480	UJ		240	NC
3-Nitroaniline	NC	NA	2900	UJ		1450	NC	2500	UJ		1250	NC
4,6-Dinitro-2-methylphenol	NC	NA	2900	U		1450	NC	2500	UJ		1250	NC
4-Bromophenyl Phenyl Ether	NC	NA	560	U		280	NC	480	UJ		240	NC
4-Chloro-3-methylphenol	NC	NA	560	UJ		280	NC	480	UJ		240	NC
4-Chloroaniline	NC	NA	1100	UJ		550	NC	960	UJ		480	NC
4-Chlorophenyl Phenyl Ether	NC	NA	560	UJ		280	NC	480	UJ		240	NC
4-Nitroaniline	NC	NA	2900	UJ		1450	NC	2500	UJ		1250	NC
4-Nitrophenol	NC	NA	2900	UJ		1450	NC	2500	UJ		1250	NC
Acenaphthene	89	b	560	UJ		280	***3.1E+00***	480	UJ		240	***2.7E+00***
Acenaphthylene	128	b	560	UJ		280	***2.2E+00***	480	UJ		240	***1.9E+00***
Anthracene	37000	a	560	U		280	7.6E-03	480	UJ		240	6.5E-03

NOTES:
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Table 7-62
Small Pond Sediment Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. SPond-S-1					Sample No. SPond-S-2				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
SVOCs (ug/kg)	**Acute**											
Benzo(a)anthracene	148000	a	560	U		280	1.9E-03	480	U		240	1.6E-03
Benzo(a)pyrene	144000	a	560	U		280	1.9E-03	480	U		240	1.7E-03
Benzo(b)fluoranthene	NC	NA	560	U		280	NC	480	U		240	NC
Benzo(g,h,i)perylene	32000	a	560	U		280	8.8E-03	480	U		240	7.5E-03
Benzo(k)fluoranthene	134000	a	560	U		280	2.1E-03	480	U		240	1.8E-03
bis(2-Chloroethoxy)methane	NC	NA	560	UJ		280	NC	480	UJ		240	NC
bis(2-Chloroethyl)ether	NC	NA	560	UJ		280	NC	480	UJ		240	NC
bis(2-Ethylhexyl)phthalate	182	b	560	U		280	***1.5E+00***	480	U		240	***1.3E+00***
Butyl Benzyl Phthalate	NC	NA	560	U		280	NC	480	U		240	NC
Carbazole	NC	NA	560	U		280	NC	480	UJ		240	NC
Chrysene	46000	a	560	U		280	6.1E-03	480	U		240	5.2E-03
Dibenzo(a,h)anthracene	13000	a	560	U		280	2.2E-02	480	U		240	1.8E-02
Dibenzofuran	NC	NA	560	UJ		280	NC	480	UJ		240	NC
Diethyl Phthalate	NC	NA	560	UJ		280	NC	480	UJ		240	NC
Dimethyl Phthalate	NC	NA	560	UJ		280	NC	480	UJ		240	NC
Di-n-butylphthalate	NC	NA	560	U		280	NC	480	UJ		240	NC
Di-n-octylphthalate	NC	NA	560	U	NA	280	NC	480	U	NA	240	NC
Fluoranthene	102000	a	560	U		280	2.7E-03	480	UJ		240	2.4E-03
Fluorene	16000	a	560	UJ		280	1.8E-02	480	UJ		240	1.5E-02
Hexachlorobenzene	2400	a	560	U		280	1.2E-01	480	UJ		240	1.0E-01
Hexachlorobutadiene	NC	NA	560	UJ		280	NC	480	UJ		240	NC
Hexachlorocyclopentadiene	NC	NA	560	UJ		280	NC	480	UJ		240	NC
Hexachloroethane	NC	NA	560	UJ		280	NC	480	UJ		240	NC
Indeno(1,2,3-cd)pyrene	32000	a	560	U		280	8.8E-03	480	U		240	7.5E-03
Isophorone	NC	NA	560	UJ		280	NC	480	UJ		240	NC
Naphthalene	391	b	560	UJ		280	7.2E-01	480	UJ		240	6.1E-01
Nitrobenzene	NC	NA	560	UJ		280	NC	480	UJ		240	NC
N-Nitroso-di-n-propylamine	NC	NA	560	UJ		280	NC	480	UJ		240	NC
N-Nitrosodiphenylamine	NC	NA	560	U		280	NC	480	UJ		240	NC
Pentachlorophenol	NC	NA	82			82	NC	14	J		14	NC
Phenanthrene	95000	a	560	U		280	2.9E-03	480	UJ		240	2.5E-03
Phenol	NC	NA	560	UJ		280	NC	480	UJ		240	NC
Pyrene	85000	a	87	J		87	1.0E-03	480	U		240	2.8E-03
Pesticides (ug/kg)												
4,4'-DDD	600	a	56	U		28	4.7E-02	48	U		24	4.0E-02
4,4'-DDE	1900	a	56	U		28	1.5E-02	48	U		24	1.3E-02
4,4'-DDT	7100	a	56	U		28	3.9E-03	48	U		24	3.4E-03
Aldrin	800	a	29	U		15	1.8E-02	25	U		13	1.6E-02
alpha-BHC	1000	a	29	U		15	1.5E-02	25	U		13	1.3E-02
alpha-Chlordane	NC	NA	29	U		15	NC	25	U		13	NC
beta-BHC	2100	a	29	U		15	6.9E-03	25	U		13	6.0E-03
delta-BHC	NC	NA	29	U		15	NC	25	U		13	NC
Dieldrin	9100	a	460	J		460	5.1E-02	210	J		210	2.3E-02
Endosulfan I	NC	NA	29	U		15	NC	25	U		13	NC
Endosulfan II	NC	NA	56	U	NA	28	NC	48	U	NA	24	NC
Endosulfan Sulfate	NC	NA	56	U		28	NC	48	U		24	NC
Endrin	13000	a	56	U		28	2.2E-03	48	U		24	1.8E-03
Endrin Aldehyde	NC	NA	56	U		28	NC	48	U		24	NC
Endrin Ketone	NC	NA	56	U		28	NC	48	U		24	NC
gamma-BHC (Lindane)	100	a	17	J		17	1.7E-01	5.8	J		5.8	5.8E-02
gamma-Chlordane	NC	NA	29	U		15	NC	25	U		13	NC
Heptachlor	NC	NA	29	U		15	NC	25	U		13	NC
Heptachlor Epoxide	500	a	29	U		15	2.9E-02	25	U		13	2.5E-02
Methoxychlor	NC	NA	290	U		145	NC	250	U		125	NC
Toxaphene	NC	NA	2900	U		1450	NC	2500	U		1250	NC
Herbicides (ug/kg)												
2,4-D	NC	NA	7.2	J		7.2	NC	6.9	J		6.9	NC
2,4-DB	NC	NA	14	U		7.0	NC	12	U		6.0	NC
2,4,5-T	NC	NA	14	U		7.0	NC	12	U		6.0	NC
2,4,5-TP (Silvex)	NC	NA	14	U		7.0	NC	12	U		6.0	NC
Dalapon	NC	NA	3400	U	NA	1700	NC	2900	U	NA	1450	NC
Dicamba	NC	NA	34	U		17	NC	29	U		15	NC
Dichlorprop	NC	NA	170	U		85	NC	140	U		70	NC
Dinoseb	NC	NA	560	U		280	NC	480	U		240	NC
MCPA	NC	NA	3400	U		1700	NC	2900	U		1450	NC
MCPP	NC	NA	3400	U		1700	NC	2900	U		1450	NC

NOTES:
a = SEL (Persaud *et al*., 1993) (SELs were TOC-normalized. TOC for pond sediment was 18%, therefore the SELs were TOC-normalized to the recommended 10% maximum)
b = PEL (Smith *et al*., 1996)
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d = Ecological Screening Level (USEPA Region 5, 2003)
e - Ontario Severe Sediment Screening Benchmark
NC = No appropriate sediment screening value available, therefore the hazard quotient could not be calculated
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R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined, therefore the hazard quotient could not be calculated.
Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentration
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations

Table 7-62
Small Pond Sediment Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. SPond-S-1					Sample No. SPond-S-2				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
PCBs (ug/kg)	**Acute**											
Total PCBs	53000	a	19974		NA	19974	3.8E-01	9250		NA	9250	1.7E-01
Dioxins/Furans (ug/kg)												
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.022	b	NR		0.0010	NA	NA	3.6		0.0010	0.0036	1.7E-01
1,2,3,4,6,7,8-HpCDF	0.022	b	NR		0.010	NA	NA	0.77		0.010	0.0077	3.6E-01
1,2,3,4,7,8,9-HpCDF	0.022	b	NR		0.010	NA	NA	0.033		0.010	0.00033	1.5E-02
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.022	b	NR		0.50	NA	NA	0.019		0.50	0.0095	4.4E-01
1,2,3,4,7,8-HxCDF	0.022	b	NR		0.10	NA	NA	0.031		0.10	0.0031	1.4E-01
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.022	b	NR		0.010	NA	NA	0.28		0.010	0.0028	1.3E-01
1,2,3,6,7,8-HxCDF	0.022	b	NR		0.10	NA	NA	0.020		0.10	0.0020	9.3E-02
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.022	b	NR		0.010	NA	NA	0.12		0.010	0.0012	5.6E-02
1,2,3,7,8,9-HxCDF	0.022	b	NR		0.10	NA	NA	0.0016	U	0.10	0.000080	3.7E-03
1,2,3,7,8-Pentachlorodibenzofuran	0.022	b	NR		0.050	NA	NA	0.0068		0.050	0.00034	1.6E-02
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.022	b	NR		1.0	NA	NA	0.010		1.0	0.010	4.7E-01
2,3,4,6,7,8-HxCDF	0.022	b	NR		0.10	NA	NA	0.016		0.10	0.0016	7.4E-02
2,3,4,7,8-PeCDF	0.022	b	NR		0.50	NA	NA	0.026		0.50	0.013	6.0E-01
2,3,7,8-TCDD	0.022	b	NR		1.0	NA	NA	0.0013		1.0	0.0013	6.0E-02
2,3,7,8-Tetrachlorodibenzofuran	0.022	b	NR		0.050	NA	NA	0.026		0.050	0.0013	6.0E-02
OCDD	0.022	b	NR		0.00010	NA	NA	24		0.00010	0.0024	1.1E-01
OCDF	0.022	b	NR		0.00010	NA	NA	2.1		0.00010	0.00021	9.8E-03
Total HpCDD	0.022	b	NR		0.0010	NA	NA	5.9		0.0010	0.0059	2.7E-01
Total HpCDF	0.022	b	NR		0.010	NA	NA	2.2		0.010	0.022	**1.0E+00**
Total HxCDD	0.022	b	NR		0.50	NA	NA	1.6		0.50	0.80	**3.7E+01**
Total HxCDF	0.022	b	NR		0.10	NA	NA	0.76		0.10	0.076	**3.5E+00**
Total PeCDD	0.022	b	NR		1.0	NA	NA	0.050		1.0	0.050	**2.3E+00**
Total PeCDF	0.022	b	NR		0.50	NA	NA	0.23		0.50	0.12	**5.3E+00**
Total TCDD	0.022	b	NR		1.0	NA	NA	0.035		1.0	0.035	**1.6E+00**
Total TCDF	0.022	b	NR		0.050	NA	NA	0.26		0.050	0.013	**6.0E-01**
Metals (mg/kg)												
Aluminum	NC	NA	8300			8300	NC	4700			4700	NC
Antimony	25	c	3.0	U		1.5	6.0E-02	2.7	U		1.4	5.4E-02
Arsenic	33	a	8.5			8.5	2.6E-01	3.2			3.2	9.7E-02
Barium	NC	NA	260			260	NC	160			160	NC
Beryllium	NC	NA	0.52			0.52	NC	0.30			0.30	NC
Cadmium	10	a	6.2			6.2	6.2E-01	0.63			0.63	6.3E-02
Calcium	NC	NA	6700			6700	NC	7700			7700	NC
Chromium	110	a	39			39	3.5E-01	11			11	1.0E-01
Cobalt	NC	NA	6.9			6.9	NC	4.2			4.2	NC
Copper	110	a	680			680	**6.2E+00**	87			87	7.9E-01
Iron	40000	a	15000			15000	3.8E-01	9000			9000	2.3E-01
Lead	250	a	390		NA	390	**1.6E+00**	31		NA	31	1.2E-01
Magnesium	NC	NA	3900			3900	NC	3800			3800	NC
Manganese	1100	a	200			200	1.8E-01	220			220	2.0E-01
Mercury	2.0	a	0.19			0.19	9.5E-02	0.029			0.029	1.5E-02
Nickel	75	a	91			91	**1.2E+00**	19			19	2.5E-01
Potassium	NC	NA	1300	J		1300	NC	880	J		880	NC
Selenium	NC	NA	1.5	U		0.75	NC	1.3	U		0.65	NC
Silver	3.7	b	0.50			0.50	1.4E-01	1.3	U		0.65	1.8E-01
Sodium	NC	NA	150	U		75	NC	140	U		70	NC
Thallium	NC	NA	1.5	U		0.75	NC	1.3	U		0.65	NC
Vanadium	NC	NA	22			22	NC	15			15	NC
Zinc	820	a	750			750	9.1E-01	140			140	1.7E-01

NOTES:
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Table 7-62
Small Pond Sediment Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. SPond-S-3				Sample No. SPond-S-3 (Dup)			
			Unadjusted Concentration	TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration	TEF (where applicable)	Adjusted Concentration	Acute HQ
VOCs (ug/kg)	**Acute**									
1,1,1-Trichloroethane	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
1,1,2,2-Tetrachloroethane	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
1,1,2-Trichloroethane	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
1,1-Dichloroethane	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
1,1-Dichloroethylene	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
1,2-Dichloroethane	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
1,2-Dichloroethene (total)	NC	NA	13 U		6.5	NC	15 U		7.5	NC
1,2-Dichloropropane	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
2-Butanone (MEK)	NC	NA	32 U		16	NC	17 J		17	NC
2-Hexanone	NC	NA	32 U		16	NC	38 U		19	NC
4-Methyl-2-pentanone (MIBK)	NC	NA	32 U		16	NC	38 U		19	NC
Acetone	NC	NA	64 U		32	NC	76 U		38	NC
Benzene	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Bromodichloromethane	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Bromoform	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Bromomethane	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Carbon Disulfide	NC	NA	6.4 U	NA	3.2	NC	7.6 U	NA	3.8	NC
Carbon Tetrachloride	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Chlorobenzene	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Chloroethane	NC	NA	6.4 UJ		3.2	NC	7.6 UJ		3.8	NC
Chloroform	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Chloromethane	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
cis-1,3-Dichloropropene	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Dibromochloromethane	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Ethylbenzene	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Methylene Chloride	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Styrene (Monomer)	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Tetrachloroethene	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Toluene	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
trans-1,3-Dichloropropene	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Trichloroethylene	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Vinyl chloride	NC	NA	6.4 U		3.2	NC	7.6 U		3.8	NC
Xylenes, Total	NC	NA	13 U		6.5	NC	15 U		7.5	NC
SVOCs (ug/kg)										
1,2,4-Trichlorobenzene	NC	NA	480 UJ		240	NC	500 U		250	NC
1,2-Dichlorobenzene	NC	NA	480 UJ		240	NC	500 U		250	NC
1,3-Dichlorobenzene	NC	NA	480 UJ		240	NC	500 U		250	NC
1,4-Dichlorobenzene	NC	NA	480 UJ		240	NC	500 U		250	NC
2,2'-Oxybis(1-Chloropropane)	NC	NA	480 UJ		240	NC	500 U		250	NC
2,4,5-Trichlorophenol	NC	NA	480 UJ		240	NC	500 U		250	NC
2,4,6-Trichlorophenol	NC	NA	480 UJ		240	NC	500 U		250	NC
2,4-Dichlorophenol	NC	NA	480 UJ		240	NC	500 U		250	NC
2,4-Dimethylphenol	NC	NA	480 UJ		240	NC	500 U		250	NC
2,4-Dinitrophenol	NC	NA	2500 UJ		1250	NC	2600 U		1300	NC
2,4-Dinitrotoluene	NC	NA	480 UJ		240	NC	500 U		250	NC
2,6-Dinitrotoluene	NC	NA	480 UJ		240	NC	500 U		250	NC
2-Chloronaphthalene	NC	NA	480 UJ		240	NC	500 U		250	NC
2-Chlorophenol	NC	NA	480 UJ		240	NC	500 U		250	NC
2-Methylnaphthalene	201	b	480 UJ		240	***1.2E+00***	500 U		250	***1.2E+00***
2-Methylphenol (o-Cresol)	NC	NA	480 UJ	NA	240	NC	500 U	NA	250	NC
2-Nitroaniline	NC	NA	2500 UJ		1250	NC	2600 U		1300	NC
2-Nitrophenol	NC	NA	480 UJ		240	NC	500 U		250	NC
3,3'-Dichlorobenzidine	NC	NA	960 U		480	NC	1000 U		500	NC
3/4-Methylphenol (m&p-Cresol)	NC	NA	480 UJ		240	NC	500 U		250	NC
3-Nitroaniline	NC	NA	2500 UJ		1250	NC	2600 U		1300	NC
4,6-Dinitro-2-methylphenol	NC	NA	2500 U		1250	NC	2600 U		1300	NC
4-Bromophenyl Phenyl Ether	NC	NA	480 U		240	NC	500 U		250	NC
4-Chloro-3-methylphenol	NC	NA	480 UJ		240	NC	500 U		250	NC
4-Chloroaniline	NC	NA	960 UJ		480	NC	1000 U		500	NC
4-Chlorophenyl Phenyl Ether	NC	NA	480 UJ		240	NC	500 U		250	NC
4-Nitroaniline	NC	NA	2500 UJ		1250	NC	2600 U		1300	NC
4-Nitrophenol	NC	NA	2500 UJ		1250	NC	2600 U		1300	NC
Acenaphthene	89	b	480 UJ		240	***2.7E+00***	500 U		250	***2.8E+00***
Acenaphthylene	128	b	480 UJ		240	***1.9E+00***	500 U		250	***2.0E+00***
Anthracene	37000	a	480 U		240	6.5E-03	500 U		250	6.8E-03

NOTES:
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Table 7-62
Small Pond Sediment Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. SPond-S-3					Sample No. SPond-S-3 (Dup)				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
SVOCs (ug/kg)	**Acute**											
Benzo(a)anthracene	148000	a	480	U		240	1.6E-03	500	U		250	1.7E-03
Benzo(a)pyrene	144000	a	480	U		240	1.7E-03	500	U		250	1.7E-03
Benzo(b)fluoranthene	NC	NA	480	U		240	NC	500	U		250	NC
Benzo(g,h,i)perylene	32000	a	480	U		240	7.5E-03	500	U		250	7.8E-03
Benzo(k)fluoranthene	134000	a	480	U		240	1.8E-03	500	U		250	1.9E-03
bis(2-Chloroethoxy)methane	NC	NA	480	UJ		240	NC	500	U		250	NC
bis(2-Chloroethyl)ether	NC	NA	480	UJ		240	NC	500	U		250	NC
bis(2-Ethylhexyl)phthalate	182	b	480	U		240	***1.3E+00***	500	U		250	***1.4E+00***
Butyl Benzyl Phthalate	NC	NA	480	U		240	NC	500	U		250	NC
Carbazole	NC	NA	480	U		240	NC	500	U		250	NC
Chrysene	46000	a	480	U		240	5.2E-03	500	U		250	5.4E-03
Dibenzo(a,h)anthracene	13000	a	480	U		240	1.8E-02	500	U		250	1.9E-02
Dibenzofuran	NC	NA	480	UJ		240	NC	500	U		250	NC
Diethyl Phthalate	NC	NA	480	UJ		240	NC	500	U		250	NC
Dimethyl Phthalate	NC	NA	480	UJ		240	NC	500	U		250	NC
Di-n-butylphthalate	NC	NA	480	U		240	NC	500	U		250	NC
Di-n-octylphthalate	NC	NA	480	U	NA	240	NC	500	U	NA	250	NC
Fluoranthene	102000	a	480	U		240	2.4E-03	500	U		250	2.5E-03
Fluorene	16000	a	480	UJ		240	1.5E-02	500	U		250	1.6E-02
Hexachlorobenzene	2400	a	480	U		240	1.0E-01	500	U		250	1.0E-01
Hexachlorobutadiene	NC	NA	480	UJ		240	NC	500	U		250	NC
Hexachlorocyclopentadiene	NC	NA	480	UJ		240	NC	500	U		250	NC
Hexachloroethane	NC	NA	480	UJ		240	NC	500	U		250	NC
Indeno(1,2,3-cd)pyrene	32000	a	480	U		240	7.5E-03	500	U		250	7.8E-03
Isophorone	NC	NA	480	UJ		240	NC	500	U		250	NC
Naphthalene	391	b	480	UJ		240	6.1E-01	500	U		250	6.4E-01
Nitrobenzene	NC	NA	480	UJ		240	NC	500	U		250	NC
N-Nitroso-di-n-propylamine	NC	NA	480	UJ		240	NC	500	U		250	NC
N-Nitrosodiphenylamine	NC	NA	480	U		240	NC	500	U		250	NC
Pentachlorophenol	NC	NA	1.6	J		1.6	NC	1.7	J		1.7	NC
Phenanthrene	95000	a	480	U		240	2.5E-03	500	U		250	2.6E-03
Phenol	NC	NA	480	UJ		240	NC	500	U		250	NC
Pyrene	85000	a	480	U		240	2.8E-03	500	U		250	2.9E-03
Pesticides (ug/kg)												
4,4'-DDD	600	a	2.7	R		R	NA	1.8	R		R	NA
4,4'-DDE	1900	a	4.8	U		2.4	1.3E-03	10	U		5	2.6E-03
4,4'-DDT	7100	a	4.8	U		2.4	3.4E-04	10	U		5	7.0E-04
Aldrin	800	a	2.5	U		1.3	1.6E-03	5.2	U		2.6	3.3E-03
alpha-BHC	1000	a	2.5	U		1.3	1.3E-03	5.2	U		2.6	2.6E-03
alpha-Chlordane	NC	NA	2.5	U		1.3	NC	5.2	U		2.6	NC
beta-BHC	2100	a	2.5	U		1.3	6.0E-04	5.2	U		2.6	1.2E-03
delta-BHC	NC	NA	2.5	U		1.3	NC	5.2	U		2.6	NC
Dieldrin	9100	a	21			21	2.3E-03	30	J		15	1.6E-03
Endosulfan I	NC	NA	2.5	U		1.3	NC	5.2	U		2.6	NC
Endosulfan II	NC	NA	4.8	U	NA	2.4	NC	10	U	NA	5	NC
Endosulfan Sulfate	NC	NA	4.8	U		2.4	NC	10	U		5	NC
Endrin	13000	a	4.8	U		2.4	1.8E-04	10	U		5	3.8E-04
Endrin Aldehyde	NC	NA	4.8	UJ		2.4	NC	10	UJ		5	NC
Endrin Ketone	NC	NA	4.8	U		2.4	NC	10	U		5	NC
gamma-BHC (Lindane)	100	a	2.5	U		1.3	1.3E-02	1	J		1	1.0E-02
gamma-Chlordane	NC	NA	2.5	U		1.3	NC	5.2	U		2.6	NC
Heptachlor	NC	NA	2.5	UJ		1.3	NC	5.2	UJ		2.6	NC
Heptachlor Epoxide	500	a	2.5	U		1.3	2.5E-03	5.2	U		2.6	5.2E-03
Methoxychlor	NC	NA	25	UJ		13	NC	52	UJ		26	NC
Toxaphene	NC	NA	250	U		125	NC	520	U		260	NC
Herbicides (ug/kg)												
2,4-D	NC	NA	12	U		6.0	NC	12	U		6	NC
2,4-DB	NC	NA	12	U		6.0	NC	12	U		6	NC
2,4,5-T	NC	NA	12	U		6.0	NC	12	U		6	NC
2,4,5-TP (Silvex)	NC	NA	12	U		6.0	NC	12	U		6	NC
Dalapon	NC	NA	2900	U	NA	1450	NC	3000	U	NA	1500	NC
Dicamba	NC	NA	29	U		15	NC	30	U		15	NC
Dichlorprop	NC	NA	140	U		70	NC	150	U		75	NC
Dinoseb	NC	NA	480	U		240	NC	500	U		250	NC
MCPA	NC	NA	2900	U		1450	NC	3000	U		1500	NC
MCPP	NC	NA	2900	U		1450	NC	3000	U		1500	NC

NOTES:
a = SEL (Persaud *et al*., 1993) (SELs were TOC-normalized. TOC for pond sediment was 18%, therefore the SELs were TOC-normalized to the recommended 10% maximum)
b = PEL (Smith *et al*., 1996)
c = ER-M (Long *et al*., 1995)
d = Ecological Screening Level (USEPA Region 5, 2003)
e - Ontario Severe Sediment Screening Benchmark
NC = No appropriate sediment screening value available, therefore the hazard quotient could not be calculated
NA = Not applicable
NR = Not analyzed
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
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R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined, therefore the hazard quotient could not be calculated.
Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentration
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations

Table 7-62
Small Pond Sediment Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. SPond-S-3				Sample No. SPond-S-3 (Dup)			
			Unadjusted Concentration	TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration	TEF (where applicable)	Adjusted Concentration	Acute HQ
PCBs (ug/kg)	**Acute**									
Total PCBs	53000	a	1467	NA	1467	2.8E-02	1944	NA	1944	3.7E-02
Dioxins/Furans (ug/kg)										
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.022	b	NR	0.0010	NA	NA	NR	0.0010	NA	NA
1,2,3,4,6,7,8-HpCDF	0.022	b	NR	0.010	NA	NA	NR	0.010	NA	NA
1,2,3,4,7,8,9-HpCDF	0.022	b	NR	0.010	NA	NA	NR	0.010	NA	NA
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.022	b	NR	0.50	NA	NA	NR	0.50	NA	NA
1,2,3,4,7,8-HxCDF	0.022	b	NR	0.10	NA	NA	NR	0.10	NA	NA
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.022	b	NR	0.010	NA	NA	NR	0.010	NA	NA
1,2,3,6,7,8-HxCDF	0.022	b	NR	0.10	NA	NA	NR	0.10	NA	NA
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.022	b	NR	0.010	NA	NA	NR	0.010	NA	NA
1,2,3,7,8,9-HxCDF	0.022	b	NR	0.10	NA	NA	NR	0.10	NA	NA
1,2,3,7,8-Pentachlorodibenzofuran	0.022	b	NR	0.050	NA	NA	NR	0.050	NA	NA
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.022	b	NR	1.0	NA	NA	NR	1.0	NA	NA
2,3,4,6,7,8-HxCDF	0.022	b	NR	0.10	NA	NA	NR	0.10	NA	NA
2,3,4,7,8-PeCDF	0.022	b	NR	0.50	NA	NA	NR	0.50	NA	NA
2,3,7,8-TCDD	0.022	b	NR	1.0	NA	NA	NR	1.0	NA	NA
2,3,7,8-Tetrachlorodibenzofuran	0.022	b	NR	0.050	NA	NA	NR	0.050	NA	NA
OCDD	0.022	b	NR	0.00010	NA	NA	NR	0.00010	NA	NA
OCDF	0.022	b	NR	0.00010	NA	NA	NR	0.00010	NA	NA
Total HpCDD	0.022	b	NR	0.0010	NA	NA	NR	0.0010	NA	NA
Total HpCDF	0.022	b	NR	0.010	NA	NA	NR	0.010	NA	NA
Total HxCDD	0.022	b	NR	0.50	NA	NA	NR	0.50	NA	NA
Total HxCDF	0.022	b	NR	0.10	NA	NA	NR	0.10	NA	NA
Total PeCDD	0.022	b	NR	1.0	NA	NA	NR	1.0	NA	NA
Total PeCDF	0.022	b	NR	0.50	NA	NA	NR	0.50	NA	NA
Total TCDD	0.022	b	NR	1.0	NA	NA	NR	1.0	NA	NA
Total TCDF	0.022	b	NR	0.050	NA	NA	NR	0.050	NA	NA
Metals (mg/kg)										
Aluminum	NC	NA	6100		6100	NC	5600		5600	NC
Antimony	25	c	2.7 U		1.4	5.4E-02	2.8 U		1.4	5.6E-02
Arsenic	33	a	3.7		3.7	1.1E-01	5.3		5.3	1.6E-01
Barium	NC	NA	160		160	NC	160		160	NC
Beryllium	NC	NA	0.37		0.37	NC	0.38		0.38	NC
Cadmium	10	a	0.98		0.98	9.8E-02	1.1		1.1	1.1E-01
Calcium	NC	NA	10000		10000	NC	10000		10000	NC
Chromium	110	a	12		12	1.1E-01	11		11	1.0E-01
Cobalt	NC	NA	5.1		5.1	NC	5.9		5.9	NC
Copper	110	a	31		31	2.8E-01	31		31	2.8E-01
Iron	40000	a	11000		11000	2.8E-01	12000		12000	3.0E-01
Lead	250	a	41	NA	41	1.6E-01	27	NA	27	1.1E-01
Magnesium	NC	NA	4200		4200	NC	4200		4200	NC
Manganese	1100	a	280		280	2.5E-01	270		270	2.5E-01
Mercury	2.0	a	0.055		0.055	2.8E-02	0.033		0.033	1.7E-02
Nickel	75	a	16		16	2.1E-01	21		21	2.8E-01
Potassium	NC	NA	1000 J		1000	NC	1000 J		1000	NC
Selenium	NC	NA	1.4 U		0.70	NC	1.4 U		0.70	NC
Silver	3.7	b	1.4 U		0.70	1.9E-01	1.4 U		0.70	1.9E-01
Sodium	NC	NA	120 U		60	NC	140 U		70	NC
Thallium	NC	NA	1.4 U		0.70	NC	1.4 U		0.70	NC
Vanadium	NC	NA	18		18	NC	18		18	NC
Zinc	820	a	130		130	1.6E-01	120		120	1.5E-01

NOTES:
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b = PEL (Smith *et al*., 1996)
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d = Ecological Screening Level (USEPA Region 5, 2003)
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R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined, therefore the hazard quotient could not be calculated.
Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentration
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

Table 7-63
Large Pond Surface Water Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. P11W					Sample No. P12W					Sample No. LPond-1-W				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
VOCs (ug/L)	**Acute**																
1,1,1-Trichloroethane	200	b	1.0	UJ		0.50	2.5E-03	1.0	UJ		0.50	2.5E-03	1.0	U		0.50	2.5E-03
1,1,2,2-Tetrachloroethane	2100	b	1.0	U		0.50	2.4E-04	1.0	U		0.50	2.4E-04	1.0	U		0.50	2.4E-04
1,1,2-Trichloroethane	5200	b	1.0	U		0.50	9.6E-05	1.0	U		0.50	9.6E-05	1.0	U		0.50	9.6E-05
1,1-Dichloroethane	830	b	1.0	U		0.50	6.0E-04	1.0	U		0.50	6.0E-04	0.21	J		0.21	2.5E-04
1,1-Dichloroethylene	450	b	1.0	U		0.50	1.1E-03	1.0	U		0.50	1.1E-03	1.0	U		0.50	1.1E-03
1,2-Dichloroethane	8800	b	1.0	U		0.50	5.7E-05	1.0	U		0.50	5.7E-05	1.0	U		0.50	5.7E-05
1,2-Dichloroethene (total)	1100	b	2.0	U		1.0	9.1E-04	2.0	U		1.0	9.1E-04	2.0	U		1.0	9.1E-04
1,2-Dichloropropane	4800	d	1.0	U		0.50	1.0E-04	1.0	U		0.50	1.0E-04	1.0	U		0.50	1.0E-04
2-Butanone (MEK)	240000	b	10	U		5.0	2.1E-05	10	U		5.0	2.1E-05	10	U		5.0	2.1E-05
2-Hexanone	1800	b	10	U		5.0	2.8E-03	10	U		5.0	2.8E-03	10	U		5.0	2.8E-03
4-Methyl-2-pentanone (MIBK)	2200	b	10	U		5.0	2.3E-03	10	U		5.0	2.3E-03	10	U		5.0	2.3E-03
Acetone	28000	b	25	U		13	4.5E-04	25	U		13	4.5E-04	25	U		13	4.5E-04
Benzene	2300	b	1.0	U		0.50	2.2E-04	1.0	U		0.50	2.2E-04	0.12	J		0.12	5.2E-05
Bromodichloromethane	10	d	1.0	UJ		0.50	5.0E-02	1.0	UJ		0.50	5.0E-02	1.0	U		0.50	5.0E-02
Bromoform	2300	b	1.0	U		0.50	2.2E-04	1.0	U		0.50	2.2E-04	1.0	U		0.50	2.2E-04
Bromomethane	NC	NA	1.0	U		0.50	NC	1.0	U		0.50	NC	1.0	UJ		0.50	NC
Carbon Disulfide	17	b	1.0	U	NA	0.50	2.9E-02	1.0	U	NA	0.50	2.9E-02	1.0	U	NA	0.50	2.9E-02
Carbon Tetrachloride	180	b	1.0	UJ		0.50	2.8E-03	1.0	UJ		0.50	2.8E-03	1.0	U		0.50	2.8E-03
Chlorobenzene	1100	b	1.0	U		0.50	4.5E-04	1.0	U		0.50	4.5E-04	1.0	U		0.50	4.5E-04
Chloroethane	13000	d	1.0	UJ		0.50	3.8E-05	1.0	UJ		0.50	3.8E-05	1.0	U		0.50	3.8E-05
Chloroform	490	b	1.0	U		0.50	1.0E-03	1.0	U		0.50	1.0E-03	1.0	U		0.50	1.0E-03
Chloromethane	16000	d	1.0	UJ		0.50	3.1E-05	1.0	UJ		0.50	3.1E-05	1.0	U		0.50	3.1E-05
cis-1,3-Dichloropropene	606	c	1.0	U		0.50	8.3E-04	1.0	U		0.50	8.3E-04	1.0	U		0.50	8.3E-04
Dibromochloromethane	NC	NA	1.0	U		0.50	NC	1.0	U		0.50	NC	1.0	U		0.50	NC
Ethylbenzene	130	b	1.0	U		0.50	3.8E-03	1.0	U		0.50	3.8E-03	1.0	U		0.50	3.8E-03
Methylene Chloride	26000	b	5.0	U		2.5	9.6E-05	5.0	U		2.5	9.6E-05	5.0	U		2.5	9.6E-05
Styrene (Monomer)	2500	d	1.0	U		0.50	2.0E-04	1.0	U		0.50	2.0E-04	1.0	U		0.50	2.0E-04
Tetrachloroethene	830	b	1.0	U		0.50	6.0E-04	1.0	U		0.50	6.0E-04	1.0	U		0.50	6.0E-04
Toluene	120	b	1.0	U		0.50	4.2E-03	1.0	U		0.50	4.2E-03	1.0	U		0.50	4.2E-03
trans-1,3-Dichloropropene	606	c	1.0	U		0.50	8.3E-04	1.0	U		0.50	8.3E-04	1.0	U		0.50	8.3E-04
Trichloroethylene	440	b	1.0	U		0.50	1.1E-03	1.0	U		0.50	1.1E-03	1.0	U		0.50	1.1E-03
Vinyl chloride	40000	d	1.0	U		0.50	1.3E-05	1.0	U		0.50	1.3E-05	1.0	U		0.50	1.3E-05
Xylenes, Total	230	b	2.0	U		1.0	4.3E-03	2.0	U		1.0	4.3E-03	2.0	UJ		1.0	4.3E-03
SVOCs (ug/L)																	
1,2,4-Trichlorobenzene	700	b	10	U		5.0	7.1E-03	10	U		5.0	7.1E-03	10	U		5.0	7.1E-03
1,2-Dichlorobenzene	260	b	10	U		5.0	1.9E-02	10	U		5.0	1.9E-02	10	U		5.0	1.9E-02
1,3-Dichlorobenzene	630	b	10	U		5.0	7.9E-03	10	U		5.0	7.9E-03	10	U		5.0	7.9E-03
1,4-Dichlorobenzene	180	b	10	U		5.0	2.8E-02	10	U		5.0	2.8E-02	10	U		5.0	2.8E-02
2,2'-Oxybis(1-Chloropropane)	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
2,4,5-Trichlorophenol	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
2,4,6-Trichlorophenol	41	d	10	U		5.0	1.2E-01	10	U		5.0	1.2E-01	10	U		5.0	1.2E-01
2,4-Dichlorophenol	630	d	10	U		5.0	7.9E-03	10	U		5.0	7.9E-03	10	U		5.0	7.9E-03
2,4-Dimethylphenol	740	d	10	U		5.0	6.8E-03	10	U		5.0	6.8E-03	10	U		5.0	6.8E-03
2,4-Dinitrophenol	85	d	50	UJ		25	2.9E-01	50	UJ		25	2.9E-01	50	U		25	2.9E-01
2,4-Dinitrotoluene	5000	d	10	U		5.0	1.0E-03	10	U		5.0	1.0E-03	10	U		5.0	1.0E-03
2,6-Dinitrotoluene	1900	d	10	U		5.0	2.6E-03	10	U		5.0	2.6E-03	10	U		5.0	2.6E-03
2-Chloronaphthalene	370	d	10	U		5.0	1.4E-02	10	U		5.0	1.4E-02	10	U		5.0	1.4E-02
2-Chlorophenol	510	d	10	U		5.0	9.8E-03	10	U		5.0	9.8E-03	10	U		5.0	9.8E-03
2-Methylnaphthalene	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
2-Methylphenol (o-Cresol)	230	b	10	U	NA	5.0	2.2E-02	10	U	NA	5.0	2.2E-02	10	U	NA	5.0	2.2E-02
2-Nitroaniline	2000	d	50	UJ		25	1.3E-02	50	UJ		25	1.3E-02	50	U		25	1.3E-02
2-Nitrophenol	6700	d	10	U		5.0	7.5E-04	10	U		5.0	7.5E-04	10	U		5.0	7.5E-04
3,3'-Dichlorobenzidine	NC	NA	20	U		10	NC	20	U		10	NC	20	U		10	NC
3/4-Methylphenol (m&p-Cresol)	670	d (based on 4 Methylphenol)	10	U		5.0	7.5E-03	10	U		5.0	7.5E-03	10	U		5.0	7.5E-03
3-Nitroaniline	NC	NA	50	UJ		25	NC	50	UJ		25	NC	50	U		25	NC
4,6-Dinitro-2-methylphenol	29	d	50	U		25	8.6E-01	50	U		25	8.6E-01	50	U		25	8.6E-01
4-Bromophenyl Phenyl Ether	36	d	10	U		5.0	1.4E-01	10	U		5.0	1.4E-01	10	U		5.0	1.4E-01
4-Chloro-3-methylphenol	310	d	10	U		5.0	1.6E-02	10	U		5.0	1.6E-02	10	U		5.0	1.6E-02
4-Chloroaniline	2.4	d	20	U		10	***4.2E+00***	20	U		10	***4.2E+00***	20	U		10	***4.2E+00***
4-Chlorophenyl Phenyl Ether	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
4-Nitroaniline	1500	d	50	U		25	1.7E-02	50	U		25	1.7E-02	50	U		25	1.7E-02
4-Nitrophenol	1200	b	50	U		25	2.1E-02	50	U		25	2.1E-02	50	U		25	2.1E-02
Acenaphthene	120	d	10	U		5.0	4.2E-02	10	U		5.0	4.2E-02	10	U		5.0	4.2E-02
Acenaphthylene	190	d	10	U		5.0	2.6E-02	10	U		5.0	2.6E-02	10	U		5.0	2.6E-02
Anthracene	13	b	10	U		5.0	3.8E-01	10	U		5.0	3.8E-01	10	U		5.0	3.8E-01

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U = Not detected at the MDL.
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Table 7-63
Large Pond Surface Water Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. P11W					Sample No. P12W					Sample No. LPond-1-W				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
SVOCs (ug/L)	**Acute**																
Benzo(a)anthracene	0.49	b	10	U		5.0	***1.0E+01***	10	U		5.0	***1.0E+01***	10	U		5.0	***1.0E+01***
Benzo(a)pyrene	0.24	b	10	U		5.0	***2.1E+01***	10	U		5.0	***2.1E+01***	10	U		5.0	***2.1E+01***
Benzo(b)fluoranthene	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
Benzo(g,h,i)perylene	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
Benzo(k)fluoranthene	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
bis(2-Chloroethoxy)methane	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
bis(2-Chloroethyl)ether	23800	c	10	U		5.0	2.1E-04	10	U		5.0	2.1E-04	10	U		5.0	2.1E-04
bis(2-Ethylhexyl)phthalate	27	b	10	U		5.0	1.9E-01	10	U		5.0	1.9E-01	10	U		5.0	1.9E-01
Butyl Benzyl Phthalate	330	c	10	U		5.0	1.5E-02	10	U		5.0	1.5E-02	10	U		5.0	1.5E-02
Carbazole	93	d	10	U		5.0	5.4E-02	10	U		5.0	5.4E-02	10	U		5.0	5.4E-02
Chrysene	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
Dibenzo(a,h)anthracene	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
Dibenzofuran	66	b	10	U		5.0	7.6E-02	10	U		5.0	7.6E-02	10	U		5.0	7.6E-02
Diethyl Phthalate	1800	b	10	U		5.0	2.8E-03	10	U		5.0	2.8E-03	10	U		5.0	2.8E-03
Dimethyl Phthalate	3300	d	10	U		5.0	1.5E-03	10	U		5.0	1.5E-03	10	U		5.0	1.5E-03
Di-n-butylphthalate	190	b	10	U		5.0	2.6E-02	1.3	J		1.3	6.8E-03	10	U		5.0	2.6E-02
Di-n-octylphthalate	NC	NA	10	U	NA	5.0	NC	10	U	NA	5.0	NC	10	U	NA	5.0	NC
Fluoranthene	398	c	10	U		5.0	1.3E-02	10	U		5.0	1.3E-02	10	U		5.0	1.3E-02
Fluorene	70	b	10	U		5.0	7.1E-02	10	U		5.0	7.1E-02	10	U		5.0	7.1E-02
Hexachlorobenzene	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
Hexachlorobutadiene	35	d	10	U		5.0	1.4E-01	10	U		5.0	1.4E-01	10	U		5.0	1.4E-01
Hexachlorocyclopentadiene	1.0	d	10	U		5.0	***5.0E+00***	10	U		5.0	***5.0E+00***	10	U		5.0	***5.0E+00***
Hexachloroethane	210	b	10	U		5.0	2.4E-02	10	U		5.0	2.4E-02	10	U		5.0	2.4E-02
Indeno(1,2,3-cd)pyrene	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
Isophorone	12000	d	10	U		5.0	4.2E-04	10	U		5.0	4.2E-04	10	U		5.0	4.2E-04
Naphthalene	190	b	10	U		5.0	2.6E-02	4.3	J		4.3	2.3E-02	10	U		5.0	2.6E-02
Nitrobenzene	15000	d	10	U		5.0	3.3E-04	10	U		5.0	3.3E-04	10	U		5.0	3.3E-04
N-Nitroso-di-n-propylamine	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
N-Nitrosodiphenylamine	3800	b	10	U		5.0	1.3E-03	10	U		5.0	1.3E-03	10	U		5.0	1.3E-03
Pentachlorophenol	19	a	1.0	U		0.50	2.6E-02	1.0	U		0.50	2.6E-02	1.0	U		0.50	2.6E-02
Phenanthrene	46	d	10	U		5.0	1.1E-01	10	U		5.0	1.1E-01	10	U		5.0	1.1E-01
Phenol	1020	c	10	U		5.0	4.9E-03	10	U		5.0	4.9E-03	10	U		5.0	4.9E-03
Pyrene	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
Pesticides (ug/L)																	
4,4'-DDD	0.19	b	0.10	UJ		0.050	2.6E-01	0.10	UJ		0.050	2.6E-01	0.10	UJ		0.050	2.6E-01
4,4'-DDE	105	c	0.10	UJ		0.050	4.8E-04	0.10	UJ		0.050	4.8E-04	0.10	UJ		0.050	4.8E-04
4,4'-DDT	1.1	a	0.028	J		0.028	2.5E-02	0.10	UJ		0.050	4.5E-02	0.10	UJ		0.050	4.5E-02
Aldrin	3.0	a	0.050	UJ		0.025	8.3E-03	0.0089	J		0.0089	3.0E-03	0.050	UJ		0.025	8.3E-03
alpha-BHC	31	d	0.050	UJ		0.025	8.1E-04	0.050	UJ		0.025	8.1E-04	0.050	UJ		0.025	8.1E-04
alpha-Chlordane	2.4	a (based on Chlordane)	0.050	UJ		0.025	1.0E-02	0.050	UJ		0.025	1.0E-02	0.050	UJ		0.025	1.0E-02
beta-BHC	NC	NA	0.050	UJ		0.025	NC	0.0079	J		0.0079	NC	0.050	UJ		0.025	NC
delta-BHC	NC	NA	0.050	UJ		0.025	NC	0.050	UJ		0.025	NC	0.050	R		R	NA
Dieldrin	0.24	a	0.010	J		0.010	4.2E-02	0.10	UJ		0.050	2.1E-01	0.10	UJ		0.050	2.1E-01
Endosulfan I	0.22	a	0.050	UJ		0.025	1.1E-01	0.050	UJ		0.025	1.1E-01	0.050	UJ		0.025	1.1E-01
Endosulfan II	0.22	a	0.10	UJ	NA	0.050	2.3E-01	0.10	UJ	NA	0.050	2.3E-01	0.10	UJ	NA	0.050	2.3E-01
Endosulfan Sulfate	31	d	0.10	UJ		0.050	1.6E-03	0.10	UJ		0.050	1.6E-03	0.10	UJ		0.050	1.6E-03
Endrin	0.086	a	0.10	UJ		0.050	5.8E-01	0.10	UJ		0.050	5.8E-01	0.10	UJ		0.050	5.8E-01
Endrin Aldehyde	0.16	d	0.10	UJ		0.050	3.1E-01	0.10	UJ		0.050	3.1E-01	0.10	UJ		0.050	3.1E-01
Endrin Ketone	NC	NA	0.10	UJ		0.050	NC	0.10	UJ		0.050	NC	0.10	UJ		0.050	NC
gamma-BHC (Lindane)	0.95	a	0.050	UJ		0.025	2.6E-02	0.050	UJ		0.025	2.6E-02	0.050	UJ		0.025	2.6E-02
gamma-Chlordane	2.4	a (based on Chlordane)	0.050	UJ		0.025	1.0E-02	0.050	UJ		0.025	1.0E-02	0.050	UJ		0.025	1.0E-02
Heptachlor	0.52	a	0.050	UJ		0.025	4.8E-02	0.050	UJ		0.025	4.8E-02	0.050	UJ		0.025	4.8E-02
Heptachlor Epoxide	0.52	a	0.050	UJ		0.025	4.8E-02	0.050	UJ		0.025	4.8E-02	0.050	UJ		0.025	4.8E-02
Methoxychlor	0.25	d	0.50	UJ		0.25	***1.0E+00***	0.50	UJ		0.25	***1.0E+00***	0.50	UJ		0.25	***1.0E+00***
Toxaphene	0.73	a	5.0	UJ		2.5	***3.4E+00***	5.0	UJ		2.5	***3.4E+00***	5.0	UJ		2.5	***3.4E+00***
Herbicides (ug/L)																	
2,4-D	100	d	0.50	U		0.25	2.5E-03	0.50	U		0.25	2.5E-03	0.50	U		0.25	2.5E-03
2,4-DB	NC	NA	0.50	U		0.25	NC	0.50	U		0.25	NC	0.50	UJ		0.25	NC
2,4,5-T	NC	NA	0.50	U		0.25	NC	0.50	U		0.25	NC	0.50	UJ		0.25	NC
2,4,5-TP (Silvex)	NC	NA	0.50	U		0.25	NC	0.50	U		0.25	NC	0.50	U		0.25	NC
Dalapon	NC	NA	120	U	NA	60	NC	120	U	NA	60	NC	120	U	NA	60	NC
Dicamba	1500	d	1.2	U		0.60	4.0E-04	1.2	U		0.60	4.0E-04	1.2	U		0.60	4.0E-04
Dichlorprop	NC	NA	6.0	U		3.0	NC	6.0	U		3.0	NC	6.0	U		3.0	NC
Dinoseb	NC	NA	10	U		5.0	NC	10	U		5.0	NC	10	U		5.0	NC
MCPA	NC	NA	120	U		60	NC	120	U		60	NC	120	U		60	NC
MCPP	NC	NA	120	U		60	NC	120	U		60	NC	120	U		60	NC

NOTES:
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Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. P11W					Sample No. P12W					Sample No. LPond-1-W				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
PCBs (ug/L)	**Acute**																
Total PCBs	0.60	b-value for Aroclor 1254	0.50	U	NA	0.25	4.2E-01	0.50	U	NA	0.25	4.2E-01	0.50	U	NA	0.25	4.2E-01
Dioxins/Furans (ug/L																	
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.10	c	0.00018		0.0010	0.00000018	1.8E-06	NR		0.0010	NA	NA	0.0000060	U	0.0010	0.0000000030	3.0E-08
1,2,3,4,6,7,8-HpCDF	0.10	c	0.000026	J	0.010	0.00000026	2.6E-06	NR		0.010	NA	NA	0.0000031	U	0.010	0.000000016	1.6E-07
1,2,3,4,7,8,9-HpCDF	0.10	c	0.0000024	UJ	0.010	0.000000012	1.2E-07	NR		0.010	NA	NA	0.0000039	U	0.010	0.000000020	2.0E-07
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.10	c	0.0000011	U	0.50	0.00000028	2.8E-06	NR		0.50	NA	NA	0.0000054	U	0.50	0.0000014	1.4E-05
1,2,3,4,7,8-HxCDF	0.10	c	0.000009	U	0.10	0.00000045	4.5E-06	NR		0.10	NA	NA	0.0000042	U	0.10	0.00000021	2.1E-06
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.10	c	0.0000066	U	0.010	0.000000033	3.3E-07	NR		0.010	NA	NA	0.0000050	U	0.010	0.000000025	2.5E-07
1,2,3,6,7,8-HxCDF	0.10	c	0.0000035	U	0.10	0.00000018	1.8E-06	NR		0.10	NA	NA	0.0000023	U	0.10	0.00000012	1.2E-06
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.10	c	0.0000034	U	0.010	0.000000017	1.7E-07	NR		0.010	NA	NA	0.0000047	U	0.010	0.000000024	2.4E-07
1,2,3,7,8,9-HxCDF	0.10	c	0.00000088	U	0.10	0.000000044	4.4E-07	NR		0.10	NA	NA	0.0000028	U	0.10	0.00000014	1.4E-06
1,2,3,7,8-Pentachlorodibenzofuran	0.10	c	0.0000057	U	0.050	0.00000014	1.4E-06	NR		0.050	NA	NA	0.0000044	U	0.050	0.00000011	1.1E-06
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.10	c	0.0000022	U	1.0	0.0000011	1.1E-05	NR		1.0	NA	NA	0.0000068	U	1.0	0.0000034	3.4E-05
2,3,4,6,7,8-HxCDF	0.10	c	0.0000023	U	0.10	0.00000012	1.2E-06	NR		0.10	NA	NA	0.0000026	U	0.10	0.00000013	1.3E-06
2,3,4,7,8-PeCDF	0.10	c	0.000012	U	0.50	0.0000030	3.0E-05	NR		0.50	NA	NA	0.0000062	U	0.50	0.0000016	1.6E-05
2,3,7,8-TCDD	0.10	c	0.00000082	U	1.0	0.00000041	4.1E-06	NR		1.0	NA	NA	0.0000037	U	1.0	0.0000019	1.9E-05
2,3,7,8-Tetrachlorodibenzofuran	0.10	c	0.000023		0.050	0.0000012	1.2E-05	NR		0.050	NA	NA	0.000013		0.050	0.00000065	6.5E-06
OCDD	0.10	c	0.0023		0.00010	0.00000023	2.3E-06	NR		0.00010	NA	NA	0.0000094	U	0.00010	0.00000000047	4.7E-09
OCDF	0.10	c	0.00011	J	0.00010	0.000000011	1.1E-07	NR		0.00010	NA	NA	0.000012	U	0.00010	0.00000000060	6.0E-09
Total HpCDD	0.10	c	0.00034		0.0010	0.00000034	3.4E-06	NR		0.0010	NA	NA	0.0000060	U	0.0010	0.0000000030	3.0E-08
Total HpCDF	0.10	c	0.000085		0.010	0.00000085	8.5E-06	NR		0.010	NA	NA	0.0000039	U	0.010	0.000000020	2.0E-07
Total HxCDD	0.10	c	0.000014	U	0.50	0.0000035	3.5E-05	NR		0.50	NA	NA	0.0000054	U	0.50	0.0000014	1.4E-05
Total HxCDF	0.10	c	0.000013	U	0.10	0.00000065	6.5E-06	NR		0.10	NA	NA	0.0000082	U	0.10	0.00000041	4.1E-06
Total PeCDD	0.10	c	0.0000022	U	1.0	0.0000011	1.1E-05	NR		1.0	NA	NA	0.0000068	U	1.0	0.0000034	3.4E-05
Total PeCDF	0.10	c	0.000025	U	0.50	0.0000063	6.3E-05	NR		0.50	NA	NA	0.000056		0.50	0.000028	2.8E-04
Total TCDD	0.10	c	0.00000087	U	1.0	0.00000044	4.4E-06	NR		1.0	NA	NA	0.0000037	U	1.0	0.0000019	1.9E-05
Total TCDF	0.10	c	0.00012		0.050	0.0000060	6.0E-05	NR		0.050	NA	NA	0.00024		0.050	0.000012	1.2E-04
Metals (mg/L)																	
Aluminum	0.75	a	7.7	J		7.7	**1.0E+01**	NR			NA	NA	0.20	UJ		0.10	1.3E-01
Antimony	0.18	b	0.020	UJ		0.010	5.6E-02	NR			NA	NA	0.020	U		0.010	5.6E-02
Arsenic	0.34	a	0.0054	J		0.0054	1.6E-02	NR			NA	NA	0.010	U		0.0050	1.5E-02
Barium	0.11	b	0.20			0.20	**1.8E+00**	NR			NA	NA	0.12			0.12	**1.1E+00**
Beryllium	0.035	b	0.0040	U		0.0020	5.7E-02	NR			NA	NA	0.0040	U		0.0020	5.7E-02
Cadmium*	0.0068	a	0.00065	J		0.00065	9.6E-02	NR			NA	NA	0.0050	U		0.0025	3.7E-01
Calcium	NC	NA	57			57	NC	NR			NA	NA	79			79	NC
Chromium	0.016	a	0.010			0.010	6.1E-01	NR			NA	NA	0.010	U		0.0050	3.1E-01
Cobalt	1.5	b	0.0036	J		0.0036	2.4E-03	NR			NA	NA	0.010	J		0.010	6.7E-03
Copper*	0.041	a	0.013	J		0.013	3.2E-01	NR			NA	NA	0.0032	J		0.0032	7.8E-02
Iron	NC	NA	8.9			8.9	NC	NR			NA	NA	0.33	J		0.33	NC
Lead*	0.35	a	0.014		NA	0.014	4.0E-02	NR		NA	NA	NA	0.0027	J	NA	0.0027	7.8E-03
Magnesium	NC	NA	15			15	NC	NR			NA	NA	22			22	NC
Manganese	2.3	b	0.46			0.46	2.0E-01	NR			NA	NA	0.22			0.22	9.6E-02
Mercury	0.0016	a	0.00020	U		0.00010	6.3E-02	NR			NA	NA	0.00020	U		0.00010	6.3E-02
Nickel*	1.2	a	0.0093	J		0.0093	7.8E-03	NR			NA	NA	0.0031	J		0.0031	2.6E-03
Potassium	NC	NA	5.6			5.6	NC	NR			NA	NA	0.64			0.64	NC
Selenium	0.020	c	0.010	U		0.0050	2.5E-01	NR			NA	NA	0.010	U		0.0050	2.5E-01
Silver*	0.027	a	0.010	U		0.0050	1.9E-01	NR			NA	NA	0.010	U		0.0050	1.9E-01
Sodium	NC	NA	6.7			6.7	NC	NR			NA	NA	5.8			5.8	NC
Thallium	0.11	b	0.010	U		0.0050	4.5E-02	NR			NA	NA	0.010	U		0.0050	4.5E-02
Vanadium	0.28	b	0.023			0.023	8.2E-02	NR			NA	NA	0.010	J		0.010	3.6E-02
Zinc*	0.31	a	0.052			0.052	1.7E-01	NR			NA	NA	0.018			0.018	5.7E-02

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Table 7-63
Large Pond Surface Water Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. LPond-2-W					Sample No. LPond-3-W				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
VOCs (ug/L)	**Acute**											
1,1,1-Trichloroethane	200	b	1.0	U		0.50	2.5E-03	1.0	U		0.50	2.5E-03
1,1,2,2-Tetrachloroethane	2100	b	1.0	U		0.50	2.4E-04	1.0	U		0.50	2.4E-04
1,1,2-Trichloroethane	5200	b	1.0	U		0.50	9.6E-05	1.0	U		0.50	9.6E-05
1,1-Dichloroethane	830	b	1.0	U		0.50	6.0E-04	1.0	U		0.50	6.0E-04
1,1-Dichloroethylene	450	b	1.0	U		0.50	1.1E-03	1.0	U		0.50	1.1E-03
1,2-Dichloroethane	8800	b	1.0	U		0.50	5.7E-05	1.0	U		0.50	5.7E-05
1,2-Dichloroethene (total)	1100	b	2.0	U		1.0	9.1E-04	2.0	U		1.0	9.1E-04
1,2-Dichloropropane	4800	d	1.0	U		0.50	1.0E-04	1.0	U		0.50	1.0E-04
2-Butanone (MEK)	240000	b	10	U		5.0	2.1E-05	10	U		5.0	2.1E-05
2-Hexanone	1800	b	10	U		5.0	2.8E-03	10	U		5.0	2.8E-03
4-Methyl-2-pentanone (MIBK)	2200	b	10	U		5.0	2.3E-03	10	U		5.0	2.3E-03
Acetone	28000	b	25	U		13	4.5E-04	25	U		13	4.5E-04
Benzene	2300	b	1.0	U		0.50	2.2E-04	1.0	U		0.50	2.2E-04
Bromodichloromethane	10	d	1.0	U		0.50	5.0E-02	1.0	U		0.50	5.0E-02
Bromoform	2300	b	1.0	U		0.50	2.2E-04	1.0	U		0.50	2.2E-04
Bromomethane	NC	NA	1.0	UJ		0.50	NC	1.0	UJ		0.50	NC
Carbon Disulfide	17	b	1.0	U	NA	0.50	2.9E-02	1.0	U	NA	0.50	2.9E-02
Carbon Tetrachloride	180	b	1.0	U		0.50	2.8E-03	1.0	U		0.50	2.8E-03
Chlorobenzene	1100	b	1.0	U		0.50	4.5E-04	1.0	U		0.50	4.5E-04
Chloroethane	13000	d	1.0	U		0.50	3.8E-05	1.0	U		0.50	3.8E-05
Chloroform	490	b	1.0	U		0.50	1.0E-03	1.0	U		0.50	1.0E-03
Chloromethane	16000	d	1.0	U		0.50	3.1E-05	1.0	U		0.50	3.1E-05
cis-1,3-Dichloropropene	606	c	1.0	U		0.50	8.3E-04	1.0	U		0.50	8.3E-04
Dibromochloromethane	NC	NA	1.0	U		0.50	NC	1.0	U		0.50	NC
Ethylbenzene	130	b	1.0	U		0.50	3.8E-03	0.14	J		0.14	1.1E-03
Methylene Chloride	26000	b	5.0	U		2.5	9.6E-05	5.0	U		2.5	9.6E-05
Styrene (Monomer)	2500	d	1.0	U		0.50	2.0E-04	1.0	U		0.50	2.0E-04
Tetrachloroethene	830	b	1.0	U		0.50	6.0E-04	1.0	U		0.50	6.0E-04
Toluene	120	b	1.0	U		0.50	4.2E-03	1.0	U		0.50	4.2E-03
trans-1,3-Dichloropropene	606	c	1.0	U		0.50	8.3E-04	1.0	U		0.50	8.3E-04
Trichloroethylene	440	b	1.0	U		0.50	1.1E-03	1.0	U		0.50	1.1E-03
Vinyl chloride	40000	d	1.0	U		0.50	1.3E-05	1.0	U		0.50	1.3E-05
Xylenes, Total	230	b	2.0	UJ		1.0	4.3E-03	2.0	UJ		1.0	4.3E-03
SVOCs (ug/L)												
1,2,4-Trichlorobenzene	700	b	10	U		5.0	7.1E-03	10	U		5.0	7.1E-03
1,2-Dichlorobenzene	260	b	10	U		5.0	1.9E-02	10	U		5.0	1.9E-02
1,3-Dichlorobenzene	630	b	10	U		5.0	7.9E-03	10	U		5.0	7.9E-03
1,4-Dichlorobenzene	180	b	10	U		5.0	2.8E-02	10	U		5.0	2.8E-02
2,2'-Oxybis(1-Chloropropane)	NC	NA	10	U		5.0	NC	10	U		5.0	NC
2,4,5-Trichlorophenol	NC	NA	10	U		5.0	NC	10	U		5.0	NC
2,4,6-Trichlorophenol	41	d	10	U		5.0	1.2E-01	10	U		5.0	1.2E-01
2,4-Dichlorophenol	630	d	10	U		5.0	7.9E-03	10	U		5.0	7.9E-03
2,4-Dimethylphenol	740	d	10	U		5.0	6.8E-03	10	U		5.0	6.8E-03
2,4-Dinitrophenol	85	d	50	U		25	2.9E-01	50	U		25	2.9E-01
2,4-Dinitrotoluene	5000	d	10	U		5.0	1.0E-03	10	U		5.0	1.0E-03
2,6-Dinitrotoluene	1900	d	10	U		5.0	2.6E-03	10	U		5.0	2.6E-03
2-Chloronaphthalene	370	d	10	U		5.0	1.4E-02	10	U		5.0	1.4E-02
2-Chlorophenol	510	d	10	U		5.0	9.8E-03	10	U		5.0	9.8E-03
2-Methylnaphthalene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
2-Methylphenol (o-Cresol)	230	b	10	U	NA	5.0	2.2E-02	10	U	NA	5.0	2.2E-02
2-Nitroaniline	2000	d	50	U		25	1.3E-02	50	U		25	1.3E-02
2-Nitrophenol	6700	d	10	U		5.0	7.5E-04	10	U		5.0	7.5E-04
3,3'-Dichlorobenzidine	NC	NA	20	U		10	NC	20	U		10	NC
3/4-Methylphenol (m&p-Cresol)	670	d (based on 4 Methylphenol)	10	U		5.0	7.5E-03	10	U		5.0	7.5E-03
3-Nitroaniline	NC	NA	50	U		25	NC	50	U		25	NC
4,6-Dinitro-2-methylphenol	29	d	50	U		25	8.6E-01	50	U		25	8.6E-01
4-Bromophenyl Phenyl Ether	36	d	10	U		5.0	1.4E-01	10	U		5.0	1.4E-01
4-Chloro-3-methylphenol	310	d	10	U		5.0	1.6E-02	10	U		5.0	1.6E-02
4-Chloroaniline	2.4	d	20	U		10	***4.2E+00***	20	U		10	***4.2E+00***
4-Chlorophenyl Phenyl Ether	NC	NA	10	U		5.0	NC	10	U		5.0	NC
4-Nitroaniline	1500	d	50	U		25	1.7E-02	50	U		25	1.7E-02
4-Nitrophenol	1200	b	50	UJ		25	2.1E-02	50	U		25	2.1E-02
Acenaphthene	120	d	10	U		5.0	4.2E-02	10	U		5.0	4.2E-02
Acenaphthylene	190	d	10	U		5.0	2.6E-02	10	U		5.0	2.6E-02
Anthracene	13	b	10	U		5.0	3.8E-01	10	U		5.0	3.8E-01

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			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
SVOCs (ug/L)	**Acute**											
Benzo(a)anthracene	0.49	b	10	U		5.0	***1.0E+01***	10	U		5.0	***1.0E+01***
Benzo(a)pyrene	0.24	b	10	U		5.0	***2.1E+01***	10	U		5.0	***2.1E+01***
Benzo(b)fluoranthene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Benzo(g,h,i)perylene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Benzo(k)fluoranthene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
bis(2-Chloroethoxy)methane	NC	NA	10	U		5.0	NC	10	U		5.0	NC
bis(2-Chloroethyl)ether	23800	c	10	U		5.0	2.1E-04	10	U		5.0	2.1E-04
bis(2-Ethylhexyl)phthalate	27	b	10	U		5.0	1.9E-01	10	U		5.0	1.9E-01
Butyl Benzyl Phthalate	330	c	10	U		5.0	1.5E-02	10	U		5.0	1.5E-02
Carbazole	93	d	10	U		5.0	5.4E-02	10	U		5.0	5.4E-02
Chrysene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Dibenzo(a,h)anthracene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Dibenzofuran	66	b	10	U		5.0	7.6E-02	10	U		5.0	7.6E-02
Diethyl Phthalate	1800	b	10	U		5.0	2.8E-03	10	U		5.0	2.8E-03
Dimethyl Phthalate	3300	d	10	U		5.0	1.5E-03	10	U		5.0	1.5E-03
Di-n-butylphthalate	190	b	10	U		5.0	2.6E-02	10	U		5.0	2.6E-02
Di-n-octylphthalate	NC	NA	10	U	NA	5.0	NC	10	U	NA	5.0	NC
Fluoranthene	398	c	10	U		5.0	1.3E-02	10	U		5.0	1.3E-02
Fluorene	70	b	10	U		5.0	7.1E-02	10	U		5.0	7.1E-02
Hexachlorobenzene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Hexachlorobutadiene	35	d	10	U		5.0	1.4E-01	10	U		5.0	1.4E-01
Hexachlorocyclopentadiene	1.0	d	10	U		5.0	***5.0E+00***	10	U		5.0	***5.0E+00***
Hexachloroethane	210	b	10	U		5.0	2.4E-02	10	U		5.0	2.4E-02
Indeno(1,2,3-cd)pyrene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Isophorone	12000	d	10	U		5.0	4.2E-04	10	U		5.0	4.2E-04
Naphthalene	190	b	10	U		5.0	2.6E-02	10	U		5.0	2.6E-02
Nitrobenzene	15000	d	10	U		5.0	3.3E-04	10	U		5.0	3.3E-04
N-Nitroso-di-n-propylamine	NC	NA	10	U		5.0	NC	10	U		5.0	NC
N-Nitrosodiphenylamine	3800	b	10	U		5.0	1.3E-03	10	U		5.0	1.3E-03
Pentachlorophenol	19	a	1.0	U		0.50	2.6E-02	1.0	U		0.50	2.6E-02
Phenanthrene	46	d	10	U		5.0	1.1E-01	10	U		5.0	1.1E-01
Phenol	1020	c	10	U		5.0	4.9E-03	10	U		5.0	4.9E-03
Pyrene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Pesticides (ug/L)												
4,4'-DDD	0.19	b	0.10	U		0.050	2.6E-01	0.10	UJ		0.050	2.6E-01
4,4'-DDE	105	c	0.10	U		0.050	4.8E-04	0.10	UJ		0.050	4.8E-04
4,4'-DDT	1.1	a	0.10	U		0.050	4.5E-02	0.10	UJ		0.050	4.5E-02
Aldrin	3.0	a	0.0500	U		0.025	8.3E-03	0.0500	UJ		0.025	8.3E-03
alpha-BHC	31	d	0.050	U		0.025	8.1E-04	0.050	UJ		0.025	8.1E-04
alpha-Chlordane	2.4	a (based on Chlordane)	0.050	U		0.025	1.0E-02	0.050	UJ		0.025	1.0E-02
beta-BHC	NC	NA	0.0500	U		0.025	NC	0.0500	UJ		0.025	NC
delta-BHC	NC	NA	0.050	U		0.025	NC	0.050	R		R	NA
Dieldrin	0.24	a	0.10	U		0.050	2.1E-01	0.10	UJ		0.050	2.1E-01
Endosulfan I	0.22	a	0.050	U		0.025	1.1E-01	0.050	UJ		0.025	1.1E-01
Endosulfan II	0.22	a	0.10	U	NA	0.050	2.3E-01	0.10	UJ	NA	0.050	2.3E-01
Endosulfan Sulfate	31	d	0.10	U		0.050	1.6E-03	0.10	UJ		0.050	1.6E-03
Endrin	0.086	a	0.10	U		0.050	5.8E-01	0.10	UJ		0.050	5.8E-01
Endrin Aldehyde	0.16	d	0.10	U		0.050	3.1E-01	0.10	UJ		0.050	3.1E-01
Endrin Ketone	NC	NA	0.10	U		0.050	NC	0.10	UJ		0.050	NC
gamma-BHC (Lindane)	0.95	a	0.050	U		0.025	2.6E-02	0.050	UJ		0.025	2.6E-02
gamma-Chlordane	2.4	a (based on Chlordane)	0.050	U		0.025	1.0E-02	0.050	UJ		0.025	1.0E-02
Heptachlor	0.52	a	0.050	U		0.025	4.8E-02	0.050	UJ		0.025	4.8E-02
Heptachlor Epoxide	0.52	a	0.050	U		0.025	4.8E-02	0.050	UJ		0.025	4.8E-02
Methoxychlor	0.25	d	0.50	U		0.25	***1.0E+00***	0.50	UJ		0.25	***1.0E+00***
Toxaphene	0.73	a	5.0	U		2.5	***3.4E+00***	5.0	UJ		2.5	***3.4E+00***
Herbicides (ug/L)												
2,4-D	100	d	0.50	U		0.25	2.5E-03	0.50	U		0.25	2.5E-03
2,4-DB	NC	NA	0.50	U		0.25	NC	0.50	UJ		0.25	NC
2,4,5-T	NC	NA	0.50	U		0.25	NC	0.50	UJ		0.25	NC
2,4,5-TP (Silvex)	NC	NA	0.50	U		0.25	NC	0.50	U		0.25	NC
Dalapon	NC	NA	120	U	NA	60	NC	120	U	NA	60	NC
Dicamba	1500	d	1.2	U		0.60	4.0E-04	1.2	U		0.60	4.0E-04
Dichlorprop	NC	NA	6.0	U		3.0	NC	6.0	U		3.0	NC
Dinoseb	NC	NA	10	U		5.0	NC	10	U		5.0	NC
MCPA	NC	NA	120	U		60	NC	120	U		60	NC
MCPP	NC	NA	120	U		60	NC	120	U		60	NC

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			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
PCBs (ug/L)	**Acute**											
Total PCBs	0.60	b-value for Aroclor 1254	0.50	U	NA	0.25	4.2E-01	0.50	U	NA	0.25	4.2E-01
Dioxins/Furans (ug/L)												
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.10	c	NR		0.0010	NA	NA	NR		0.0010	NA	NA
1,2,3,4,6,7,8-HpCDF	0.10	c	NR		0.010	NA	NA	NR		0.010	NA	NA
1,2,3,4,7,8,9-HpCDF	0.10	c	NR		0.010	NA	NA	NR		0.010	NA	NA
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.10	c	NR		0.50	NA	NA	NR		0.50	NA	NA
1,2,3,4,7,8-HxCDF	0.10	c	NR		0.10	NA	NA	NR		0.10	NA	NA
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.10	c	NR		0.010	NA	NA	NR		0.010	NA	NA
1,2,3,6,7,8-HxCDF	0.10	c	NR		0.10	NA	NA	NR		0.10	NA	NA
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.10	c	NR		0.010	NA	NA	NR		0.010	NA	NA
1,2,3,7,8,9-HxCDF	0.10	c	NR		0.10	NA	NA	NR		0.10	NA	NA
1,2,3,7,8-Pentachlorodibenzofuran	0.10	c	NR		0.050	NA	NA	NR		0.050	NA	NA
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.10	c	NR		1.0	NA	NA	NR		1.0	NA	NA
2,3,4,6,7,8-HxCDF	0.10	c	NR		0.10	NA	NA	NR		0.10	NA	NA
2,3,4,7,8-PeCDF	0.10	c	NR		0.50	NA	NA	NR		0.50	NA	NA
2,3,7,8-TCDD	0.10	c	NR		1.0	NA	NA	NR		1.0	NA	NA
2,3,7,8-Tetrachlorodibenzofuran	0.10	c	NR		0.050	NA	NA	NR		0.050	NA	NA
OCDD	0.10	c	NR		0.00010	NA	NA	NR		0.00010	NA	NA
OCDF	0.10	c	NR		0.00010	NA	NA	NR		0.00010	NA	NA
Total HpCDD	0.10	c	NR		0.0010	NA	NA	NR		0.0010	NA	NA
Total HpCDF	0.10	c	NR		0.010	NA	NA	NR		0.010	NA	NA
Total HxCDD	0.10	c	NR		0.50	NA	NA	NR		0.50	NA	NA
Total HxCDF	0.10	c	NR		0.10	NA	NA	NR		0.10	NA	NA
Total PeCDD	0.10	c	NR		1.0	NA	NA	NR		1.0	NA	NA
Total PeCDF	0.10	c	NR		0.50	NA	NA	NR		0.50	NA	NA
Total TCDD	0.10	c	NR		1.0	NA	NA	NR		1.0	NA	NA
Total TCDF	0.10	c	NR		0.050	NA	NA	NR		0.050	NA	NA
Metals (mg/L)												
Aluminum	0.75	a	0.20	J		0.20	2.7E-01	0.20	UJ		0.10	1.3E-01
Antimony	0.18	b	0.020	U		0.010	5.6E-02	0.020	U		0.010	5.6E-02
Arsenic	0.34	a	0.010	U		0.0050	1.5E-02	0.010	U		0.0050	1.5E-02
Barium	0.11	b	0.12			0.12	**1.1E+00**	0.14			0.14	**1.3E+00**
Beryllium	0.035	b	0.0040	U		0.0020	5.7E-02	0.0040	U		0.0020	5.7E-02
Cadmium*	0.0068	a	0.0050	U		0.0025	3.7E-01	0.0050	U		0.0025	3.7E-01
Calcium	NC	NA	77			77	NC	91			91	NC
Chromium	0.016	a	0.010	U		0.0050	3.1E-01	0.010	U		0.0050	3.1E-01
Cobalt	1.5	b	0.010	U		0.0050	3.3E-03	0.010	U		0.0050	3.3E-03
Copper*	0.041	a	0.020	U		0.010	2.4E-01	0.020	U		0.010	2.4E-01
Iron	NC	NA	0.070	J		0.070	NC	0.052			0.052	NC
Lead*	0.35	a	0.0050	UJ	NA	0.0025	7.2E-03	0.0050	U	NA	0.0025	7.2E-03
Magnesium	NC	NA	24			24	NC	24			24	NC
Manganese	2.3	b	0.046			0.046	2.0E-02	0.039			0.039	1.7E-02
Mercury	0.0016	a	0.00020	U		0.00010	6.3E-02	0.00020	U		0.00010	6.3E-02
Nickel*	1.2	a	0.040	U		0.020	1.7E-02	0.040	UJ		0.020	1.7E-02
Potassium	NC	NA	0.51	J		0.51	NC	0.49			0.49	NC
Selenium	0.020	c	0.010	UJ		0.0050	2.5E-01	0.010	U		0.0050	2.5E-01
Silver*	0.027	a	0.010	U		0.0050	1.9E-01	0.010	U		0.0050	1.9E-01
Sodium	NC	NA	7.6			7.6	NC	7.1			7.1	NC
Thallium	0.11	b	0.010	UJ		0.0050	4.5E-02	0.010	U		0.0050	4.5E-02
Vanadium	0.28	b	0.0013	U		0.00065	2.3E-03	0.00084	J		0.00084	3.0E-03
Zinc*	0.31	a	0.013			0.013	4.1E-02	0.013			0.013	4.1E-02

NOTES:
a = CMC - NAWQC (USEPA, 1996)
b = Tier II Secondary Acute Screening Values (GLWQI) (40 CFR 122 *et al* ., 1995)
c = USEPA Region IV Acute Freshwater Screening Values (USEPA, 2001)
d = Illinois EPA Acute Water Quality Guidelines (IEPA, 2003)
* = Benchmarks for this metal were adjusted for the site specific average hardness of 312 mg/L.
The calculations were taken directly from the NAWQC.
NC = No appropriate sediment screening value available, therefore the hazard quotient could not be calculated
NA = Not applicable
NR = Not analyzed
Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined, therefore the hazard quotient could not be calculated.

Table 7-64
Small Pond Surface Water Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. SPond-1-W					Sample No. SPond-2-W				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
VOCs (ug/L)	**Acute**											
1,1,1-Trichloroethane	200	b	1.0	U		0.50	2.5E-03	1.0	U		0.50	2.5E-03
1,1,2,2-Tetrachloroethane	2100	b	1.0	U		0.50	2.4E-04	1.0	U		0.50	2.4E-04
1,1,2-Trichloroethane	5200	b	1.0	U		0.50	9.6E-05	1.0	U		0.50	9.6E-05
1,1-Dichloroethane	830	b	1.0	U		0.50	6.0E-04	1.0	U		0.50	6.0E-04
1,1-Dichloroethylene	450	b	1.0	U		0.50	1.1E-03	1.0	U		0.50	1.1E-03
1,2-Dichloroethane	8800	b	1.0	U		0.50	5.7E-05	1.0	U		0.50	5.7E-05
1,2-Dichloroethene (total)	1100	b	2.0	UJ		1.0	9.1E-04	2.0	UJ		1.0	9.1E-04
1,2-Dichloropropane	4800	d	1.0	U		0.50	1.0E-04	1.0	U		0.50	1.0E-04
2-Butanone (MEK)	240000	b	10	U		5.0	2.1E-05	1.2	J		1.2	5.0E-06
2-Hexanone	1800	b	10	U		5.0	2.8E-03	10	U		5.0	2.8E-03
4-Methyl-2-pentanone (MIBK)	2200	b	10	U		5.0	2.3E-03	10	U		5.0	2.3E-03
Acetone	28000	b	25	U		13	4.5E-04	25	U		13	4.5E-04
Benzene	2300	b	0.7	J		0.72	3.1E-04	1.0	U		0.50	2.2E-04
Bromodichloromethane	10	d	1.0	U		0.50	5.0E-02	1.0	U		0.50	5.0E-02
Bromoform	2300	b	1.0	U		0.50	2.2E-04	1.0	U		0.50	2.2E-04
Bromomethane	NC	NA	1.0	U		0.50	NC	1.0	U		0.50	NC
Carbon Disulfide	17	b	1.0	U	NA	0.50	2.9E-02	1.0	U	NA	0.50	2.9E-02
Carbon Tetrachloride	180	b	1.0	UJ		0.50	2.8E-03	1.0	UJ		0.50	2.8E-03
Chlorobenzene	1100	b	1.0	U		0.50	4.5E-04	1.0	U		0.50	4.5E-04
Chloroethane	13000	d	1.0	U		0.50	3.8E-05	1.0	U		0.50	3.8E-05
Chloroform	490	b	1.0	U		0.50	1.0E-03	1.0	U		0.50	1.0E-03
Chloromethane	16000	d	1.0	U		0.50	3.1E-05	1.0	U		0.50	3.1E-05
cis-1,3-Dichloropropene	606	c	1.0	U		0.50	8.3E-04	1.0	U		0.50	8.3E-04
Dibromochloromethane	NC	NA	1.0	U		0.50	NC	1.0	U		0.50	NC
Ethylbenzene	130	b	0.5	J		0.45	3.5E-03	1.0	U		0.50	3.8E-03
Methylene Chloride	26000	b	5.0	U		2.5	9.6E-05	5.0	U		2.5	9.6E-05
Styrene (Monomer)	2500	d	2.8			2.8	1.1E-03	1.0	U		0.50	2.0E-04
Tetrachloroethene	830	b	1.0	U		0.50	6.0E-04	1.0	U		0.50	6.0E-04
Toluene	120	b	1.0	U		0.50	4.2E-03	1.0	U		0.50	4.2E-03
trans-1,3-Dichloropropene	606	c	1.0	U		0.50	8.3E-04	1.0	U		0.50	8.3E-04
Trichloroethylene	440	b	1.0	U		0.50	1.1E-03	1.0	U		0.50	1.1E-03
Vinyl chloride	40000	d	1.0	U		0.50	1.3E-05	1.0	U		0.50	1.3E-05
Xylenes, Total	230	b	2.0	U		1.0	4.3E-03	2.0	U		1.0	4.3E-03
SVOCs (ug/L)												
1,2,4-Trichlorobenzene	700	b	10	U		5.0	7.1E-03	10	U		5.0	7.1E-03
1,2-Dichlorobenzene	260	b	10	U		5.0	1.9E-02	10	U		5.0	1.9E-02
1,3-Dichlorobenzene	630	b	10	U		5.0	7.9E-03	10	U		5.0	7.9E-03
1,4-Dichlorobenzene	180	b	10	U		5.0	2.8E-02	10	U		5.0	2.8E-02
2,2'-Oxybis(1-Chloropropane)	NC	NA	10	U		5.0	NC	10	U		5.0	NC
2,4,5-Trichlorophenol	NC	NA	10	U		5.0	NC	10	U		5.0	NC
2,4,6-Trichlorophenol	41	d	10	U		5.0	1.2E-01	10	U		5.0	1.2E-01
2,4-Dichlorophenol	630	d	10	U		5.0	7.9E-03	10	U		5.0	7.9E-03
2,4-Dimethylphenol	740	d	10	U		5.0	6.8E-03	10	U		5.0	6.8E-03
2,4-Dinitrophenol	85	d	50	U		25	2.9E-01	50	U		25	2.9E-01
2,4-Dinitrotoluene	5000	d	10	U		5.0	1.0E-03	10	U		5.0	1.0E-03
2,6-Dinitrotoluene	1900	d	10	U		5.0	2.6E-03	10	U		5.0	2.6E-03
2-Chloronaphthalene	370	d	10	U		5.0	1.4E-02	10	U		5.0	1.4E-02
2-Chlorophenol	510	d	10	U		5.0	9.8E-03	10	U		5.0	9.8E-03
2-Methylnaphthalene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
2-Methylphenol (o-Cresol)	230	b	10	U	NA	5.0	2.2E-02	10	U	NA	5.0	2.2E-02
2-Nitroaniline	2000	d	50	U		25	1.3E-02	50	U		25	1.3E-02
2-Nitrophenol	6700	d	10	U		5.0	7.5E-04	10	U		5.0	7.5E-04
3,3'-Dichlorobenzidine	NC	NA	20	U		10	NC	20	U		10	NC
3/4-Methylphenol (m&p-Cresol)	670	d (based on 4 Methylphenol)	10	U		5.0	7.5E-03	10	U		5.0	7.5E-03
3-Nitroaniline	NC	NA	50	U		25	NC	50	U		25	NC
4,6-Dinitro-2-methylphenol	29	d	50	U		25	8.6E-01	50	U		25	8.6E-01
4-Bromophenyl Phenyl Ether	36	d	10	U		5.0	1.4E-01	10	U		5.0	1.4E-01
4-Chloro-3-methylphenol	310	d	10	U		5.0	1.6E-02	10	U		5.0	1.6E-02
4-Chloroaniline	2.4	d	20	U		10	***4.2E+00***	20	U		10	***4.2E+00***
4-Chlorophenyl Phenyl Ether	NC	NA	10	U		5.0	NC	10	U		5.0	NC
4-Nitroaniline	1500	d	50	U		25	1.7E-02	50	U		25	1.7E-02
4-Nitrophenol	1200	b	50	U		25	2.1E-02	50	U		25	2.1E-02
Acenaphthene	120	d	10	U		5.0	4.2E-02	10	U		5.0	4.2E-02
Acenaphthylene	190	d	10	U		5.0	2.6E-02	10	U		5.0	2.6E-02
Anthracene	13	b	10	U		5.0	3.8E-01	10	U		5.0	3.8E-01

NOTES:
a = CMC - NAWQC (USEPA, 1996)
b = Tier II Secondary Acute Screening Values (GLWQI) (40 CFR 122 *et al* ., 1995)
c = USEPA Region IV Acute Freshwater Screening Values (USEPA, 2001)
d = Illinois EPA Acute Water Quality Guidelines (IEPA, 2003)
* = Benchmarks for this metal were adjusted for the site specific average hardness of 398 mg/L. The calculations were taken directly from the NAWQC.
NC = No appropriate sediment screening value available, therefore the hazard quotient could not be calculated
NA = Not applicable
NR = Not analyzed
Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table 7-64
Small Pond Surface Water Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. SPond-1-W					Sample No. SPond-2-W				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
SVOCs (ug/L)	**Acute**											
Benzo(a)anthracene	0.49	b	10	U		5.0	***1.0E+01***	10	U		5.0	***1.0E+01***
Benzo(a)pyrene	0.24	b	1.5	J		1.5	**6.3E+00**	10	U		5.0	***2.1E+01***
Benzo(b)fluoranthene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Benzo(g,h,i)perylene	NC	NA	2.7	J		2.7	NC	10	U		5.0	NC
Benzo(k)fluoranthene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
bis(2-Chloroethoxy)methane	NC	NA	10	U		5.0	NC	10	U		5.0	NC
bis(2-Chloroethyl)ether	23800	c	10	U		5.0	2.1E-04	10	U		5.0	2.1E-04
bis(2-Ethylhexyl)phthalate	27	b	10	U		5.0	1.9E-01	10	U		5.0	1.9E-01
Butyl Benzyl Phthalate	330	c	10	U		5.0	1.5E-02	10	U		5.0	1.5E-02
Carbazole	93	d	10	UJ		5.0	5.4E-02	10	UJ		5.0	5.4E-02
Chrysene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Dibenzo(a,h)anthracene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Dibenzofuran	66	b	10	U		5.0	7.6E-02	10	U		5.0	7.6E-02
Diethyl Phthalate	1800	b	10	U		5.0	2.8E-03	10	U		5.0	2.8E-03
Dimethyl Phthalate	3300	d	10	U		5.0	1.5E-03	10	U		5.0	1.5E-03
Di-n-butylphthalate	190	b	10	U		5.0	2.6E-02	10	U		5.0	2.6E-02
Di-n-octylphthalate	NC	NA	10	U	NA	5.0	NC	10	U	NA	5.0	NC
Fluoranthene	398	c	10	U		5.0	1.3E-02	10	U		5.0	1.3E-02
Fluorene	70	b	10	U		5.0	7.1E-02	10	U		5.0	7.1E-02
Hexachlorobenzene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Hexachlorobutadiene	35	d	10	U		5.0	1.4E-01	10	U		5.0	1.4E-01
Hexachlorocyclopentadiene	1.0	d	10	U		5.0	***5.0E+00***	10	U		5.0	***5.0E+00***
Hexachloroethane	210	b	10	U		5.0	2.4E-02	10	U		5.0	2.4E-02
Indeno(1,2,3-cd)pyrene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Isophorone	12000	d	10	U		5.0	4.2E-04	10	U		5.0	4.2E-04
Naphthalene	190	b	10	U		5.0	2.6E-02	10	U		5.0	2.6E-02
Nitrobenzene	15000	d	10	U		5.0	3.3E-04	10	U		5.0	3.3E-04
N-Nitroso-di-n-propylamine	NC	NA	10	U		5.0	NC	10	U		5.0	NC
N-Nitrosodiphenylamine	3800	b	10	U		5.0	1.3E-03	10	U		5.0	1.3E-03
Pentachlorophenol	19	a	1.0	U		0.50	2.6E-02	1.0	U		0.50	2.6E-02
Phenanthrene	46	d	10	U		5.0	1.1E-01	10	U		5.0	1.1E-01
Phenol	1020	c	10	U		5.0	4.9E-03	10	U		5.0	4.9E-03
Pyrene	NC	NA	10	U		5.0	NC	10	U		5.0	NC
Pesticides (ug/L)												
4,4'-DDD	0.19	b	0.10	UJ		0.050	2.6E-01	0.10	U		0.050	2.6E-01
4,4'-DDE	105	c	0.10	UJ		0.050	4.8E-04	0.10	U		0.050	4.8E-04
4,4'-DDT	1.1	a	0.10	UJ		0.050	4.5E-02	0.10	U		0.050	4.5E-02
Aldrin	3.0	a	0.050	UJ		0.025	8.3E-03	0.0500	U		0.025	8.3E-03
alpha-BHC	31	d	0.050	UJ		0.025	8.1E-04	0.050	U		0.025	8.1E-04
alpha-Chlordane	2.4	a (based on Chlordane)	0.050	UJ		0.025	1.0E-02	0.050	U		0.025	1.0E-02
beta-BHC	NC	NA	0.050	UJ		0.025	NC	0.0500	U		0.025	NC
delta-BHC	NC	NA	0.050	UJ		0.025	NC	0.050	U		0.025	NC
Dieldrin	0.24	a	0.10	UJ		0.050	2.1E-01	0.10	U		0.050	2.1E-01
Endosulfan I	0.22	a	0.050	UJ		0.025	1.1E-01	0.050	U		0.025	1.1E-01
Endosulfan II	0.22	a	0.10	UJ	NA	0.050	2.3E-01	0.10	U	NA	0.050	2.3E-01
Endosulfan Sulfate	31	d	0.10	UJ		0.050	1.6E-03	0.10	U		0.050	1.6E-03
Endrin	0.086	a	0.10	UJ		0.050	5.8E-01	0.10	U		0.050	5.8E-01
Endrin Aldehyde	0.16	d	0.10	UJ		0.050	3.1E-01	0.10	U		0.050	3.1E-01
Endrin Ketone	NC	NA	0.10	UJ		0.050	NC	0.10	U		0.050	NC
gamma-BHC (Lindane)	0.95	a	0.050	UJ		0.025	2.6E-02	0.050	U		0.025	2.6E-02
gamma-Chlordane	2.4	a (based on Chlordane)	0.050	UJ		0.025	1.0E-02	0.050	U		0.025	1.0E-02
Heptachlor	0.52	a	0.050	UJ		0.025	4.8E-02	0.050	U		0.025	4.8E-02
Heptachlor Epoxide	0.52	a	0.050	UJ		0.025	4.8E-02	0.050	U		0.025	4.8E-02
Methoxychlor	0.25	d	0.50	UJ		0.25	***1.0E+00***	0.50	U		0.25	***1.0E+00***
Toxaphene	0.73	a	5.0	UJ		2.5	***3.4E+00***	5.0	U		2.5	***3.4E+00***
Herbicides (ug/L)												
2,4-D	100	d	0.50	U		0.25	2.5E-03	0.50	U		0.25	2.5E-03
2,4-DB	NC	NA	0.50	U		0.25	NC	0.50	U		0.25	NC
2,4,5-T	NC	NA	0.50	U		0.25	NC	0.50	U		0.25	NC
2,4,5-TP (Silvex)	NC	NA	0.50	U		0.25	NC	0.50	U		0.25	NC
Dalapon	NC	NA	120	U	NA	60	NC	120	U	NA	60	NC
Dicamba	1500	d	1.2	U		0.60	4.0E-04	1.2	U		0.60	4.0E-04
Dichlorprop	NC	NA	6.0	U		3.0	NC	6.0	U		3.0	NC
Dinoseb	NC	NA	10	U		5.0	NC	10	U		5.0	NC
MCPA	NC	NA	120	U		60	NC	120	U		60	NC
MCPP	NC	NA	120	U		60	NC	120	U		60	NC

NOTES:
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b = Tier II Secondary Acute Screening Values (GLWQI) (40 CFR 122 *et al* ., 1995)
c = USEPA Region IV Acute Freshwater Screening Values (USEPA, 2001)
d = Illinois EPA Acute Water Quality Guidelines (IEPA, 2003)
* = Benchmarks for this metal were adjusted for the site specific average hardness of 398 mg/L.
The calculations were taken directly from the NAWQC.
NC = No appropriate sediment screening value available, therefore the hazard quotient could not be calculated
NA = Not applicable
NR = Not analyzed
Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table 7-64
Small Pond Surface Water Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. SPond-1-W					Sample No. SPond-2-W				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
PCBs (ug/L)	**Acute**											
Total PCBs	0.60	b-value for Aroclor 1254	0.50	U	NA	0.25	4.2E-01	0.050		NA	0.050	8.3E-02
Dioxins/Furans (ug/L)												
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.10	c	0.0000049	U	0.0010	0.0000000025	2.5E-08	NR		0.0010	NA	NA
1,2,3,4,6,7,8-HpCDF	0.10	c	0.0000036	U	0.010	0.0000000018	1.8E-07	NR		0.010	NA	NA
1,2,3,4,7,8,9-HpCDF	0.10	c	0.0000039	U	0.010	0.0000000020	2.0E-07	NR		0.010	NA	NA
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.10	c	0.000004	U	0.50	0.0000010	1.0E-05	NR		0.50	NA	NA
1,2,3,4,7,8-HxCDF	0.10	c	0.0000053	U	0.10	0.00000027	2.7E-06	NR		0.10	NA	NA
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.10	c	0.000004	U	0.010	0.0000000020	2.0E-07	NR		0.010	NA	NA
1,2,3,6,7,8-HxCDF	0.10	c	0.0000049	U	0.10	0.00000025	2.5E-06	NR		0.10	NA	NA
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.10	c	0.0000037	U	0.010	0.0000000019	1.9E-07	NR		0.010	NA	NA
1,2,3,7,8,9-HxCDF	0.10	c	0.0000058	U	0.10	0.00000029	2.9E-06	NR		0.10	NA	NA
1,2,3,7,8-Pentachlorodibenzofuran	0.10	c	0.0000037	U	0.050	0.0000000093	9.3E-07	NR		0.050	NA	NA
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.10	c	0.0000052	U	1.0	0.0000026	2.6E-05	NR		1.0	NA	NA
2,3,4,6,7,8-HxCDF	0.10	c	0.0000055	U	0.10	0.00000028	2.8E-06	NR		0.10	NA	NA
2,3,4,7,8-PeCDF	0.10	c	0.0000038	U	0.50	0.00000095	9.5E-06	NR		0.50	NA	NA
2,3,7,8-TCDD	0.10	c	0.0000026	U	1.0	0.0000013	1.3E-05	NR		1.0	NA	NA
2,3,7,8-Tetrachlorodibenzofuran	0.10	c	0.0000047	U	0.050	0.00000012	1.2E-06	NR		0.050	NA	NA
OCDD	0.10	c	0.000015	U	0.00010	0.00000000075	7.5E-09	NR		0.00010	NA	NA
OCDF	0.10	c	0.0000051	U	0.00010	0.00000000026	2.6E-09	NR		0.00010	NA	NA
Total HpCDD	0.10	c	0.0000049	U	0.0010	0.0000000025	2.5E-08	NR		0.0010	NA	NA
Total HpCDF	0.10	c	0.0000039	U	0.010	0.0000000020	2.0E-07	NR		0.010	NA	NA
Total HxCDD	0.10	c	0.000004	U	0.50	0.0000010	1.0E-05	NR		0.50	NA	NA
Total HxCDF	0.10	c	0.0000058	U	0.10	0.00000029	2.9E-06	NR		0.10	NA	NA
Total PeCDD	0.10	c	0.000007	U	1.0	0.0000035	3.5E-05	NR		1.0	NA	NA
Total PeCDF	0.10	c	0.0000038	U	0.50	0.00000095	9.5E-06	NR		0.50	NA	NA
Total TCDD	0.10	c	0.0000026	U	1.0	0.0000013	1.3E-05	NR		1.0	NA	NA
Total TCDF	0.10	c	0.0000047	U	0.050	0.00000012	1.2E-06	NR		0.050	NA	NA
Metals (mg/L)												
Aluminum	0.75	a	0.20	UJ		0.10	1.3E-01	0.20	UJ		0.10	1.3E-01
Antimony	0.18	b	0.0075	U		0.0038	2.1E-02	0.0046	U		0.0023	1.3E-02
Arsenic	0.34	a	0.010	U		0.0050	1.5E-02	0.010	U		0.0050	1.5E-02
Barium	0.11	b	0.15			0.15	**1.4E+00**	0.14			0.14	**1.3E+00**
Beryllium	0.035	b	0.0040	U		0.0020	5.7E-02	0.0040	U		0.0020	5.7E-02
Cadmium*	0.0087	a	0.0050	U		0.0025	2.9E-01	0.0050	U		0.0025	2.9E-01
Calcium	NC	NA	110			110	NC	98			98	NC
Chromium	0.016	a	0.010	U		0.0050	3.1E-01	0.0012	U		0.00060	3.7E-02
Cobalt	1.5	b	0.010	U		0.0050	3.3E-03	0.010	U		0.0050	3.3E-03
Copper*	0.051	a	0.0053			0.0053	1.0E-01	0.0051			0.0051	1.0E-01
Iron	NC	NA	0.034			0.034	NC	0.031			0.031	NC
Lead*	0.47	a	0.0050	UJ	NA	0.0025	5.3E-03	0.0050	UJ	NA	0.0025	5.3E-03
Magnesium	NC	NA	27			27	NC	24			24	NC
Manganese	2.3	b	0.022			0.022	9.6E-03	0.021			0.021	9.1E-03
Mercury	0.0016	a	0.000090			0.000090	5.6E-02	0.00020	U		0.00010	6.3E-02
Nickel*	1.5	a	0.040	U		0.020	1.3E-02	0.0022			0.0022	1.5E-03
Potassium	NC	NA	2.2			2.2	NC	1.9			1.9	NC
Selenium	0.020	c	0.010	U		0.0050	2.5E-01	0.010	U		0.0050	2.5E-01
Silver*	0.041	a	0.010	U		0.0050	1.2E-01	0.010	U		0.0050	1.2E-01
Sodium	NC	NA	11			11	NC	11			11	NC
Thallium	0.11	b	0.010	U		0.0050	4.5E-02	0.010	U		0.0050	4.5E-02
Vanadium	0.28	b	0.010	U		0.0050	1.8E-02	0.0011	U		0.00055	2.0E-03
Zinc*	0.39	a	0.016			0.016	4.1E-02	0.024			0.024	6.2E-02

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Table 7-64
Small Pond Surface Water Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. SPond-2-W (Dup)					Sample No. SPond-3-W				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
VOCs (ug/L)	**Acute**											
1,1,1-Trichloroethane	200	b	1.0	U		0.50	2.5E-03	1.0	U		0.50	2.5E-03
1,1,2,2-Tetrachloroethane	2100	b	1.0	U		0.50	2.4E-04	1.0	U		0.50	2.4E-04
1,1,2-Trichloroethane	5200	b	1.0	U		0.50	9.6E-05	1.0	U		0.50	9.6E-05
1,1-Dichloroethane	830	b	1.0	U		0.50	6.0E-04	1.0	U		0.50	6.0E-04
1,1-Dichloroethylene	450	b	1.0	U		0.50	1.1E-03	1.0	U		0.50	1.1E-03
1,2-Dichloroethane	8800	b	1.0	U		0.50	5.7E-05	1.0	U		0.50	5.7E-05
1,2-Dichloroethene (total)	1100	b	2.0	UJ		1.0	9.1E-04	2.0	UJ		1.0	9.1E-04
1,2-Dichloropropane	4800	d	1.0	U		0.50	1.0E-04	1.0	U		0.50	1.0E-04
2-Butanone (MEK)	240000	b	10	U		5.0	2.1E-05	10	U		5.0	2.1E-05
2-Hexanone	1800	b	10	U		5.0	2.8E-03	10	U		5.0	2.8E-03
4-Methyl-2-pentanone (MIBK)	2200	b	10	U		5.0	2.3E-03	10	U		5.0	2.3E-03
Acetone	28000	b	25	U		13	4.5E-04	25	U		13	4.5E-04
Benzene	2300	b	1.0	U		0.50	2.2E-04	0.1	J		0.10	4.3E-05
Bromodichloromethane	10	d	1.0	U		0.50	5.0E-02	1.0	U		0.50	5.0E-02
Bromoform	2300	b	1.0	U		0.50	2.2E-04	1.0	U		0.50	2.2E-04
Bromomethane	NC	NA	1.0	U		0.50	NC	1.0	U		0.50	NC
Carbon Disulfide	17	b	1.0	U	NA	0.50	2.9E-02	1.0	U	NA	0.50	2.9E-02
Carbon Tetrachloride	180	b	1.0	UJ		0.50	2.8E-03	1.0	UJ		0.50	2.8E-03
Chlorobenzene	1100	b	1.0	U		0.50	4.5E-04	1.0	U		0.50	4.5E-04
Chloroethane	13000	d	1.0	U		0.50	3.8E-05	1.0	U		0.50	3.8E-05
Chloroform	490	b	1.0	U		0.50	1.0E-03	1.0	U		0.50	1.0E-03
Chloromethane	16000	d	1.0	U		0.50	3.1E-05	1.0	U		0.50	3.1E-05
cis-1,3-Dichloropropene	606	c	1.0	U		0.50	8.3E-04	1.0	U		0.50	8.3E-04
Dibromochloromethane	NC	NA	1.0	U		0.50	NC	1.0	U		0.50	NC
Ethylbenzene	130	b	1.0	U		0.50	3.8E-03	1.0	U		0.50	3.8E-03
Methylene Chloride	26000	b	5.0	U		2.5	9.6E-05	5.0	U		2.5	9.6E-05
Styrene (Monomer)	2500	d	1.0	U		0.50	2.0E-04	1.0	U		0.50	2.0E-04
Tetrachloroethene	830	b	1.0	U		0.50	6.0E-04	1.0	U		0.50	6.0E-04
Toluene	120	b	1.0	U		0.50	4.2E-03	1.0	U		0.50	4.2E-03
trans-1,3-Dichloropropene	606	c	1.0	U		0.50	8.3E-04	1.0	U		0.50	8.3E-04
Trichloroethylene	440	b	1.0	U		0.50	1.1E-03	1.0	U		0.50	1.1E-03
Vinyl chloride	40000	d	1.0	U		0.50	1.3E-05	1.0	U		0.50	1.3E-05
Xylenes, Total	230	b	2.0	U		1.0	4.3E-03	2.0	U		1.0	4.3E-03
SVOCs (ug/L)												
1,2,4-Trichlorobenzene	700	b	10	U		5.0	7.1E-03	10	U		5.0	7.1E-03
1,2-Dichlorobenzene	260	b	10	U		5.0	1.9E-02	10	U		5.0	1.9E-02
1,3-Dichlorobenzene	630	b	10	U		5.0	7.9E-03	10	U		5.0	7.9E-03
1,4-Dichlorobenzene	180	b	10	U		5.0	2.8E-02	10	U		5.0	2.8E-02
2,2'-Oxybis(1-Chloropropane)	NC	NA	10	U		5.0	NC	10	U		5.0	NC
2,4,5-Trichlorophenol	NC	NA	10	U		5.0	NC	10	UJ		5.0	NC
2,4,6-Trichlorophenol	41	d	10	U		5.0	1.2E-01	10	UJ		5.0	1.2E-01
2,4-Dichlorophenol	630	d	10	U		5.0	7.9E-03	10	U		5.0	7.9E-03
2,4-Dimethylphenol	740	d	10	U		5.0	6.8E-03	10	U		5.0	6.8E-03
2,4-Dinitrophenol	85	d	50	U		25	2.9E-01	50	UJ		25	2.9E-01
2,4-Dinitrotoluene	5000	d	10	U		5.0	1.0E-03	10	UJ		5.0	1.0E-03
2,6-Dinitrotoluene	1900	d	10	U		5.0	2.6E-03	10	UJ		5.0	2.6E-03
2-Chloronaphthalene	370	d	10	U		5.0	1.4E-02	10	UJ		5.0	1.4E-02
2-Chlorophenol	510	d	10	U		5.0	9.8E-03	10	U		5.0	9.8E-03
2-Methylnaphthalene	NC	NA	10	U		5.0	NC	10	UJ		5.0	NC
2-Methylphenol (o-Cresol)	230	b	10	U	NA	5.0	2.2E-02	10	U	NA	5.0	2.2E-02
2-Nitroaniline	2000	d	50	U		25	1.3E-02	50	UJ		25	1.3E-02
2-Nitrophenol	6700	d	10	U		5.0	7.5E-04	10	U		5.0	7.5E-04
3,3'-Dichlorobenzidine	NC	NA	20	U		10	NC	20	UJ		10	NC
3/4-Methylphenol (m&p-Cresol)	670	d (based on 4 Methylphenol)	10	U		5.0	7.5E-03	10	U		5.0	7.5E-03
3-Nitroaniline	NC	NA	50	U		25	NC	50	UJ		25	NC
4,6-Dinitro-2-methylphenol	29	d	50	U		25	8.6E-01	50	UJ		25	8.6E-01
4-Bromophenyl Phenyl Ether	36	d	10	U		5.0	1.4E-01	10	UJ		5.0	1.4E-01
4-Chloro-3-methylphenol	310	d	10	U		5.0	1.6E-02	10	UJ		5.0	1.6E-02
4-Chloroaniline	2.4	d	20	U		10	***4.2E+00***	20	U		10	***4.2E+00***
4-Chlorophenyl Phenyl Ether	NC	NA	10	U		5.0	NC	10	UJ		5.0	NC
4-Nitroaniline	1500	d	50	U		25	1.7E-02	50	UJ		25	1.7E-02
4-Nitrophenol	1200	b	50	U		25	2.1E-02	50	UJ		25	2.1E-02
Acenaphthene	120	d	10	U		5.0	4.2E-02	10	UJ		5.0	4.2E-02
Acenaphthylene	190	d	10	U		5.0	2.6E-02	10	UJ		5.0	2.6E-02
Anthracene	13	b	10	U		5.0	3.8E-01	10	UJ		5.0	3.8E-01

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Table 7-64
Small Pond Surface Water Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. SPond-2-W (Dup)					Sample No. SPond-3-W				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
SVOCs (ug/L)	**Acute**											
Benzo(a)anthracene	0.49	b	10	U		5.0	***1.0E+01***	10	UJ		5.0	***1.0E+01***
Benzo(a)pyrene	0.24	b	10	U		5.0	***2.1E+01***	4.6	J		4.6	**1.9E+01**
Benzo(b)fluoranthene	NC	NA	10	U		5.0	NC	10	UJ		5.0	NC
Benzo(g,h,i)perylene	NC	NA	10	U		5.0	NC	3.4	J		3.4	NC
Benzo(k)fluoranthene	NC	NA	10	U		5.0	NC	7.2	J		7.2	NC
bis(2-Chloroethoxy)methane	NC	NA	10	U		5.0	NC	10	U		5.0	NC
bis(2-Chloroethyl)ether	23800	c	10	U		5.0	2.1E-04	10	U		5.0	2.1E-04
bis(2-Ethylhexyl)phthalate	27	b	10	U		5.0	1.9E-01	10	UJ		5.0	1.9E-01
Butyl Benzyl Phthalate	330	c	10	U		5.0	1.5E-02	10	UJ		5.0	1.5E-02
Carbazole	93	d	10	UJ		5.0	5.4E-02	10	UJ		5.0	5.4E-02
Chrysene	NC	NA	10	U		5.0	NC	10	UJ		5.0	NC
Dibenzo(a,h)anthracene	NC	NA	10	U		5.0	NC	10	UJ		5.0	NC
Dibenzofuran	66	b	10	U		5.0	7.6E-02	10	UJ		5.0	7.6E-02
Diethyl Phthalate	1800	b	10	U		5.0	2.8E-03	10	UJ		5.0	2.8E-03
Dimethyl Phthalate	3300	d	10	U		5.0	1.5E-03	10	UJ		5.0	1.5E-03
Di-n-butylphthalate	190	b	10	U		5.0	2.6E-02	10	UJ		5.0	2.6E-02
Di-n-octylphthalate	NC	NA	10	U	NA	5.0	NC	10	UJ	NA	5.0	NC
Fluoranthene	398	c	10	U		5.0	1.3E-02	10	UJ		5.0	1.3E-02
Fluorene	70	b	10	U		5.0	7.1E-02	10	UJ		5.0	7.1E-02
Hexachlorobenzene	NC	NA	10	U		5.0	NC	10	UJ		5.0	NC
Hexachlorobutadiene	35	d	10	U		5.0	1.4E-01	10	U		5.0	1.4E-01
Hexachlorocyclopentadiene	1.0	d	10	U		5.0	***5.0E+00***	10	UJ		5.0	***5.0E+00***
Hexachloroethane	210	b	10	U		5.0	2.4E-02	10	U		5.0	2.4E-02
Indeno(1,2,3-cd)pyrene	NC	NA	10	U		5.0	NC	3	J		3.0	NC
Isophorone	12000	d	10	U		5.0	4.2E-04	10	U		5.0	4.2E-04
Naphthalene	190	b	10	U		5.0	2.6E-02	10	U		5.0	2.6E-02
Nitrobenzene	15000	d	10	U		5.0	3.3E-04	10	U		5.0	3.3E-04
N-Nitroso-di-n-propylamine	NC	NA	10	U		5.0	NC	10	U		5.0	NC
N-Nitrosodiphenylamine	3800	b	10	U		5.0	1.3E-03	10	UJ		5.0	1.3E-03
Pentachlorophenol	19	a	1.0	U		0.50	2.6E-02	1.0	U		0.50	2.6E-02
Phenanthrene	46	d	10	U		5.0	1.1E-01	10	UJ		5.0	1.1E-01
Phenol	1020	c	10	U		5.0	4.9E-03	10	U		5.0	4.9E-03
Pyrene	NC	NA	10	U		5.0	NC	10	UJ		5.0	NC
Pesticides (ug/L)												
4,4'-DDD	0.19	b	0.10	UJ		0.050	2.6E-01	0.10	UJ		0.050	2.6E-01
4,4'-DDE	105	c	0.10	UJ		0.050	4.8E-04	0.10	UJ		0.050	4.8E-04
4,4'-DDT	1.1	a	0.1	UJ		0.050	4.5E-02	0.10	UJ		0.050	4.5E-02
Aldrin	3.0	a	0.050	UJ		0.025	8.3E-03	0.050	UJ		0.025	8.3E-03
alpha-BHC	31	d	0.050	UJ		0.025	8.1E-04	0.050	UJ		0.025	8.1E-04
alpha-Chlordane	2.4	a (based on Chlordane)	0.050	UJ		0.025	1.0E-02	0.050	UJ		0.025	1.0E-02
beta-BHC	NC	NA	0.050	UJ		0.025	NC	0.050	UJ		0.025	NC
delta-BHC	NC	NA	0.050	UJ		0.025	NC	0.050	UJ		0.025	NC
Dieldrin	0.24	a	0.100	UJ		0.050	2.1E-01	0.010	UJ		0.0050	2.1E-02
Endosulfan I	0.22	a	0.050	UJ		0.025	1.1E-01	0.050	UJ		0.025	1.1E-01
Endosulfan II	0.22	a	0.10	UJ	NA	0.050	2.3E-01	0.10	UJ	NA	0.050	2.3E-01
Endosulfan Sulfate	31	d	0.10	UJ		0.050	1.6E-03	0.10	UJ		0.050	1.6E-03
Endrin	0.086	a	0.10	UJ		0.050	5.8E-01	0.10	UJ		0.050	5.8E-01
Endrin Aldehyde	0.16	d	0.10	UJ		0.050	3.1E-01	0.10	UJ		0.050	3.1E-01
Endrin Ketone	NC	NA	0.10	UJ		0.050	NC	0.10	UJ		0.050	NC
gamma-BHC (Lindane)	0.95	a	0.050	UJ		0.025	2.6E-02	0.050	UJ		0.025	2.6E-02
gamma-Chlordane	2.4	a (based on Chlordane)	0.050	UJ		0.025	1.0E-02	0.050	UJ		0.025	1.0E-02
Heptachlor	0.52	a	0.050	UJ		0.025	4.8E-02	0.050	UJ		0.025	4.8E-02
Heptachlor Epoxide	0.52	a	0.050	UJ		0.025	4.8E-02	0.050	UJ		0.025	4.8E-02
Methoxychlor	0.25	d	0.50	UJ		0.25	***1.0E+00***	0.50	UJ		0.25	***1.0E+00***
Toxaphene	0.73	a	5.0	UJ		2.5	***3.4E+00***	5.0	UJ		2.5	***3.4E+00***
Herbicides (ug/L)												
2,4-D	100	d	0.50	U		0.25	2.5E-03	0.50	U		0.25	2.5E-03
2,4-DB	NC	NA	0.50	U		0.25	NC	0.50	U		0.25	NC
2,4,5-T	NC	NA	0.50	U		0.25	NC	0.50	U		0.25	NC
2,4,5-TP (Silvex)	NC	NA	0.50	U		0.25	NC	0.50	U		0.25	NC
Dalapon	NC	NA	120	U	NA	60	NC	120	U	NA	60	NC
Dicamba	1500	d	1.2	U		0.60	4.0E-04	1.2	U		0.60	4.0E-04
Dichlorprop	NC	NA	6.0	U		3.0	NC	6.0	U		3.0	NC
Dinoseb	NC	NA	10	U		5.0	NC	10	UJ		5.0	NC
MCPA	NC	NA	120	U		60	NC	120	U		60	NC
MCPP	NC	NA	120	U		60	NC	120	U		60	NC

NOTES:
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b = Tier II Secondary Acute Screening Values (GLWQI) (40 CFR 122 *et al* ., 1995)
c = USEPA Region IV Acute Freshwater Screening Values (USEPA, 2001)
d = Illinois EPA Acute Water Quality Guidelines (IEPA, 2003)
* = Benchmarks for this metal were adjusted for the site specific average hardness of 398 mg/L.
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NC = No appropriate sediment screening value available, therefore the hazard quotient could not be calculated
NA = Not applicable
NR = Not analyzed
Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
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Table 7-64
Small Pond Surface Water Hazard Quotients
Sauget, IL

Analyte	Benchmark	Reference for Benchmark	Sample No. SPond-2-W (Dup)					Sample No. SPond-3-W				
			Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ	Unadjusted Concentration		TEF (where applicable)	Adjusted Concentration	Acute HQ
PCBs (ug/L)	**Acute**											
Total PCBs	0.60	b-value for Aroclor 1254	0.50	U	NA	0.25	4.2E-01	0.50	U	NA	0.25	4.2E-01
Dioxins/Furans (ug/L)												
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.10	c	NR		0.0010	NA	NA	NR		0.0010	NA	NA
1,2,3,4,6,7,8-HpCDF	0.10	c	NR		0.010	NA	NA	NR		0.010	NA	NA
1,2,3,4,7,8,9-HpCDF	0.10	c	NR		0.010	NA	NA	NR		0.010	NA	NA
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.10	c	NR		0.50	NA	NA	NR		0.50	NA	NA
1,2,3,4,7,8-HxCDF	0.10	c	NR		0.10	NA	NA	NR		0.10	NA	NA
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.10	c	NR		0.010	NA	NA	NR		0.010	NA	NA
1,2,3,6,7,8-HxCDF	0.10	c	NR		0.10	NA	NA	NR		0.10	NA	NA
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.10	c	NR		0.010	NA	NA	NR		0.010	NA	NA
1,2,3,7,8,9-HxCDF	0.10	c	NR		0.10	NA	NA	NR		0.10	NA	NA
1,2,3,7,8-Pentachlorodibenzofuran	0.10	c	NR		0.050	NA	NA	NR		0.050	NA	NA
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	0.10	c	NR		1.0	NA	NA	NR		1.0	NA	NA
2,3,4,6,7,8-HxCDF	0.10	c	NR		0.10	NA	NA	NR		0.10	NA	NA
2,3,4,7,8-PeCDF	0.10	c	NR		0.50	NA	NA	NR		0.50	NA	NA
2,3,7,8-TCDD	0.10	c	NR		1.0	NA	NA	NR		1.0	NA	NA
2,3,7,8-Tetrachlorodibenzofuran	0.10	c	NR		0.050	NA	NA	NR		0.050	NA	NA
OCDD	0.10	c	NR		0.00010	NA	NA	NR		0.00010	NA	NA
OCDF	0.10	c	NR		0.00010	NA	NA	NR		0.00010	NA	NA
Total HpCDD	0.10	c	NR		0.0010	NA	NA	NR		0.0010	NA	NA
Total HpCDF	0.10	c	NR		0.010	NA	NA	NR		0.010	NA	NA
Total HxCDD	0.10	c	NR		0.50	NA	NA	NR		0.50	NA	NA
Total HxCDF	0.10	c	NR		0.10	NA	NA	NR		0.10	NA	NA
Total PeCDD	0.10	c	NR		1.0	NA	NA	NR		1.0	NA	NA
Total PeCDF	0.10	c	NR		0.50	NA	NA	NR		0.50	NA	NA
Total TCDD	0.10	c	NR		1.0	NA	NA	NR		1.0	NA	NA
Total TCDF	0.10	c	NR		0.050	NA	NA	NR		0.050	NA	NA
Metals (mg/L)												
Aluminum	0.75	a	0.20	UJ		0.10	1.3E-01	0.20	UJ		0.10	1.3E-01
Antimony	0.18	b	0.020	U		0.010	5.6E-02	0.020	U		0.010	5.6E-02
Arsenic	0.34	a	0.010	U		0.0050	1.5E-02	0.010	U		0.0050	1.5E-02
Barium	0.11	b	0.14			0.14	**1.3E+00**	0.12			0.12	**1.1E+00**
Beryllium	0.035	b	0.0040	U		0.0020	5.7E-02	0.0040	U		0.0020	5.7E-02
Cadmium*	0.0087	a	0.0050	U		0.0025	2.9E-01	0.0050	U		0.0025	2.9E-01
Calcium	NC	NA	97			97	NC	78			78	NC
Chromium	0.016	a	0.010	U		0.0050	3.1E-01	0.010	U		0.0050	3.1E-01
Cobalt	1.5	b	0.010	U		0.0050	3.3E-03	0.010	U		0.0050	3.3E-03
Copper*	0.051	a	0.0052			0.0052	1.0E-01	0.0067			0.0067	1.3E-01
Iron	NC	NA	0.023			0.023	NC	0.050			0.050	NC
Lead*	0.47	a	0.0050	UJ	NA	0.0025	5.3E-03	0.0050	UJ	NA	0.0025	5.3E-03
Magnesium	NC	NA	24			24	NC	20			20	NC
Manganese	2.3	b	0.019			0.019	8.3E-03	0.042			0.042	1.8E-02
Mercury	0.0016	a	0.000088			0.000088	5.5E-02	0.00010			0.00010	6.3E-02
Nickel*	1.5	a	0.040	U		0.020	1.3E-02	0.040	U		0.020	1.3E-02
Potassium	NC	NA	1.9			1.9	NC	2.4			2.4	NC
Selenium	0.020	c	0.010	U		0.0050	2.5E-01	0.010	U		0.0050	2.5E-01
Silver*	0.041	a	0.010	U		0.0050	1.2E-01	0.010	U		0.0050	1.2E-01
Sodium	NC	NA	11			11	NC	9.8			9.8	NC
Thallium	0.11	b	0.010	U		0.0050	4.5E-02	0.010	U		0.0050	4.5E-02
Vanadium	0.28	b	0.010	U		0.0050	1.8E-02	0.00092	U		0.00046	1.6E-03
Zinc*	0.39	a	0.016			0.016	4.1E-02	0.020			0.020	5.2E-02

NOTES:
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Table 7-65
Pond Fish Body Burden Hazard Quotients
Sauget, IL

Analyte	Species	Effect	Endpoint	Exposure Route	Body Part	Species Start Lifestage	Residue Conce. Wet	NOEL Equivalent Conc.	Calculated TRV Benchmark	HQ
SVOCs (ug/kg)										
1,2,4-Trichlorobenzene (a)	fathead minnow	mortality	NOED	water	whole body	immature	170,000	170,000	8108	0.061
							355,000	355,000		
							140,000	140,000		
							180,000	180,000		
				absorption			170000	170000		
							180000	180000		
							170000	170000		
							180000	180000		
	rainbow trout			water			180	180		
	bluegill			absorption			520	520		
	spot	behavior		ingestion			50	50		
				combined			890	890		
				absorption			1150	1150		
		mortality		ingestion			50	50		
				combined			890	890		
				absorption			1150	1150		
1,2-Dichlorobenzene (a)	bluegill	mortality	NOED	absorption	whole body	immature	700	700	700	0.71
1,3-Dichlorobenzene (a)	rainbow trout	mortality	NOED	water	whole body	immature	640	640	8764	0.056
	fathead minnow	growth				embryo	120000	120000		
1,4-Dichlorobenzene (a)	bluegill	mortality	NOED	absorption	whole body	immature	610	610	610	0.81
2,2'-Oxybis(1-Chloropropane)										NV
2,4,5-Trichlorophenol (a)	goldfish	mortality	NOED	water	whole body	adult	50000	50000	70711	0.0070
	fathead minnow	mortality, growth				immature	100000	100000		
2,4,6-Trichlorophenol (a)	goldfish	mortality	NOED	water	whole body	adult	125000	125000	9062	0.055
	guppy						675	657		
2,4-Dichlorophenol (a)	goldfish	mortality	NOED	water	whole body	adult	100000	100000	134164	0.0037
							180000	180000		
2,4-Dimethylphenol (a)	bluegill	mortality	NOED	absorption	whole body	immature	1530	1530	3027	0.16
	rainbow trout		LOED			adult	59900	5990		
2,4-Dinitrophenol (a,b)	rainbow trout	mortality	LD50	water	whole body	NA	6900	69	243	***10***
							10100	101		
							25400	254		
							35500	355		
							12200	122		
							16700	167		
							23600	236		
							73700	737		
							13600	136		
							15700	157		
							16400	164		
							44900	449		
			LOED	absorption		adult	29500	2950		
2,4-Dinitrotoluene (b)	guppy	mortality	NOED	water	whole body	adult	41200	41200	41200	0.012
2,6-Dinitrotoluene (b)	guppy	mortality	NOED	water	whole body	adult	78400	78400	78400	0.0063
2-Chloronaphthalene										NV
2-Chlorophenol (b)	goldfish	mortality	NOED	water	whole body	adult	250000	25000	55224	0.0090
							50000	50000		
							110000	110000		
							150000	150000		
							155000	155000		
							250000	250000		
	bluegill			absorption		immature	1960	1960		
2-Methylnaphthalene (a,c)	rainbow trout	mortality	LD50	injection	whole body	NA	292000	292000	2920	0.17
2-Methylphenol (o-Cresol) (d)	mosquitofish (d)	survival	NOED	absorption	whole body	NA	84	84	84	***5.9***
2-Nitroaniline										NV
2-Nitrophenol (e)									1430	0.35
3,3'-Dichlorobenzidine (f)	golden ide	survival	NOED	absorption	whole body	NA	30500	30500	30500	0.033
3/4-Methylphenol (m&p-Cresol) (a,g)	rainbow trout	biochemical	LOED	injection	whole body	NA	16300	1630	1630	0.30
3-Nitroaniline										NV
4,6-Dinitro-2-methylphenol										NV
4-Bromophenyl Phenyl Ether										NV

Table 7-65
Pond Fish Body Burden Hazard Quotients
Sauget, IL

Analyte	Species	Effect	Endpoint	Exposure Route	Body Part	Species Start Lifestage	Residue Conce. Wet	NOEL Equivalent Conc.	Calculated TRV Benchmark	HQ
4-Chloro-3-methylphenol (a,h)	brown trout	cellular	LOED	absorption	whole body	immature	4190	419	454	***1.1***
							6390	639		
							3500	350		
4-Chloroaniline (a,f)	golden ide	survival	NOED	absorption	whole body	NA	500	500	2439	0.41
	rainbow trout	mortality	LOED			adult	119000	11900		
4-Chlorophenyl Phenyl Ether										NV
4-Nitroaniline										NV
4-Nitrophenol (a,b)	fathead minnow	mortality	NOED	water	whole body	immature	25100	25100	1430	***1.8***
	rainbow trout		LD50	injection		NA	75000	750		
						immature	47000	470		
						NA	47300	473		
Acenaphthene (i)	bluegill	survival	NOED	absorption	whole body	immature	3500	3500	3500	0.14
Acenaphthylene (i)									45500	0.011
Anthracene (f)	golden ide	survival	NOED	absorption	whole body	NA	45500	45500	45500	0.011
Benzo(a)anthracene (f)	golden ide	survival	NOED	absorption	whole body	NA	17500	17500	17500	0.028
Benzo(a)pyrene (b)	rainbow trout	mortality	NOED	sediment to water	whole body	egg	10200	10200	403	***1.2***
	gizzard shad	biochemical		absorption	carcass	adult	20	20		
							24	24		
				injection	whole body		1000	1000		
	rainbow trout			absorption	carcass	immature	73	73		
		reproduction			whole body	egg	12340	12340		
Benzo(b)fluoranthene (k)									26168	0.019
Benzo(g,h,i)perylene (a)	rainbow trout	biochemical	NOED	injection	whole body	NA	27500	27500	26168	0.019
					liver		24900	24900		
Benzo(k)fluoranthene (k)									26168	0.019
bis(2-Chloroethoxy)methane										NV
bis(2-Chloroethyl)ether (j)	bluegill	mortality	LOED	absorption	whole body	immature	110	11	11	***45***
bis(2-Ethylhexyl)phthalate (j)	bluegill	mortality	NOED	absorption	whole body	immature	660	660	660	0.75
Butyl Benzyl Phthalate (j)	bluegill	mortality	LOED	absorption	whole body	immature	6450	645	645	0.77
Carbazole										NV
Chrysene (a)	common carp	survival	NOED	combined	whole body	adult	930	930	1621	0.31
	rainbow trout	biochemical	LOED	injection	liver	NA	22700	2270		
						immature	109000	10900		
							3000	300		
Dibenzo(a,h)anthracene (f)	golden ide	survival	NOED	absorption	whole body	NA	5000	5000	5000	0.10
Dibenzofuran										NV
Diethyl Phthalate (b)	rainbow trout	mortality	NOED	absorption	whole body	immature	1100	1100	1100	0.45
Dimethyl Phthalate (a)	bluegill	mortality	NOED	absorption	whole body	immature	500	500	500	0.99
Di-n-butylphthalate (l)									500	0.99
Di-n-octylphthalate (l)									500	0.99
Fluoranthene (a)	rainbow trout	biochemical	NOED	absorption	carcass	immature	1250	1250	11295	0.044
	common carp			ingestion	whole body	NA	30000	30000		
				injection			20000	20000		
							21700	21700		
Fluorene (i)									45500	0.011
Hexachlorobenzene (a)	fathead minnow	growth	NOED	water	whole body	juvenile	9300	9300	27763	0.018
		survival					9300	9300		
		growth				larval	97000	97000		
		mortality					97000	97000		
						embryo	97000	97000		
		survival		absorption		adult	4000	4000		
							6300	6300		
							14800	14800		
							30500	30500		
							46500	46500		
	sheepshead minnow	mortality		combined			89000	89000		
	pinfish						120000	120000		
	mosquito fish					NA	17000	17000		
	fathead minnow	growth		absorption		egg-embryo	8000	8000		
							15000	15000		
							27000	27000		
							46000	46000		
							97000	97000		
		mortality					8000	8000		
							15000	15000		
							27000	27000		
							46000	46000		
							97000	97000		

Table 7-65
Pond Fish Body Burden Hazard Quotients
Sauget, IL

Analyte	Species	Effect	Endpoint	Exposure Route	Body Part	Species Start Lifestage	Residue Conce. Wet	NOEL Equivalent Conc.	Calculated TRV Benchmark	HQ
Hexachlorobutadiene (a)	goldfish	growth	LOED	absorption	carcass	immature	17800	1780	3382	0.15
		mortality			whole body		34800	3480		
		behavior			carcass		17800	1780		
		biochemical					17800	1780		
			NOED				27600	27600		
		growth	LOED				27600	2760		
Hexachlorocyclopentadiene (m)	fathead minnow	survival	NOED	water	whole body	larva-juvenile	40	40	40	***12***
Hexachloroethane (n)	rainbow trout	survival	NOED	water	whole body	juvenile	7.1	7.1	7.1	***70***
Indeno(1,2,3-cd)pyrene (k)									26168	0.019
Isophorone (a)	bluegill	mortality	NOED	absorption	whole body	immature	650	650	650	0.76
Naphthalene (a)	mummichog	biochemical	LOED	absorption	whole body	adult	12000	1200	2979	0.17
		mortality					17000	1700		
		physiological					5000	500		
		biochemical	NOED				23000	23000		
	channel catfish		LOED	injection		immature	100000	10000		
Nitrobenzene (a)	guppy	survival	NOED	water	whole body	juvenile	29000	29000	50232	0.010
							29000	29000		
							362970	362970		
							362970	362970		
	mosquito fish	mortality		absorption		NA	5000	5000		
	guppy					adult	29000	29000		
N-Nitroso-di-n-propylamine										NV
N-Nitrosodiphenylamine (a)	bluegill	mortality	NOED	absorption	whole body	immature	2000	2000	2000	0.25
Pentachlorophenol (b)	pink salmon	survival	NOED	water	whole body	egg	1090	1090	6629	0.0038
	rainbow trout				carcass	adult	110	110		
				diet	whole body		40	40		
	chinook salmon	survival, growth		water		immature	2320	2320		
	goldfish	survival				NA	20000	20000		
							82000	82000		
	fathead minnow					larvae	151000	151000		
							21500	21500		
							17800	17800		
		growth,survival					25100	25100		
							22100	22100		
		growth					12300	12300		
Phenanthrene (a,f)	golden ide	survival	NOED	absorption	whole body	NA	88000	88000	51381	0.0096
	rainbow trout	biochemical		injection		immature	30000	30000		
Phenol (a)	mosquito fish	survival	NOED	absorption	whole body	NA	67	67	35664	0.014
	goldfish	mortality		water		adult	66000	66000		
							80000	80000		
							110000	110000		
							117000	117000		
							124000	124000		
							130000	130000		
Pyrene (a)	common carp	biochemical	LOED	injection	whole body	NA	20000	2000	1482	0.334
					liver		28700	2870		
	rainbow trout				whole body	immature	30000	3000		
			NOED	absorption	carcass		280	280		
Pesticides (ug/kg)										
4,4'-DDD (a)	brook trout	growth, mortality	NOED	injection	whole body	immature	500	500	63	0.078
		mortality		diet			8.0	8.0		
4,4'-DDE (a)	lake trout	growth	NOED	combined	whole body	fry	2680	2680	383	0.013
	brook trout	growth,mortality		injection		immature	500	500		
		mortality		diet			42	42		
4,4'-DDT (a)	fathead minnow	mortality	LOED	ingestion	whole body	adult	68900	6890	3896	0.0051
				water			24000	2400		
		reproduction	NOED	ingestion			12200	12200		
				combined			19000	19000		
			LOED				3800	380		
							24000	2400		
Aldrin (o)	mosquito fish	mortality	NOED	combined	whole body	NA	157	157	157	0.016
alpha-BHC (b,p)	golden ide	mortality	NOED	absorption	whole body	NA	22500	22500	23717	0.00011
	guppy	survival	NOED	water		juvenile	25000	25000		

Table 7-65
Pond Fish Body Burden Hazard Quotients
Sauget, IL

Analyte	Species	Effect	Endpoint	Exposure Route	Body Part	Species Start Lifestage	Residue Conce. Wet	NOEL Equivalent Conc.	Calculated TRV Benchmark	HQ
alpha-Chlordane (b)	pinfish	mortality	LOED	combined	whole body	adult	16600	1660	1660	0.0015
beta-BHC (f)	golden ide	mortality	NOED	absorption	whole body	NA	22500	22500	22500	0.00011
delta-BHC (q)	golden ide	mortality	NOED	absorption	whole body	NA	22500	22500	22500	0.0011
Dieldrin (a)	bluegill	behavior	LOED	absorption	whole body	immature	3700	370	370	0.38
Endosulfan I (a)	pinfish	mortality	NOED	combined	whole body	adult	195	195	195	0.013
Endosulfan II (a)	pinfish	mortality	NOED	combined	whole body	adult	195	195	195	0.025
Endosulfan Sulfate (a)	pinfish	mortality	NOED	combined	whole body	adult	195	195	195	0.025
Endrin (a)	channel catfish	behavior	LOED	absorption	whole body	immature	1000	100	164	0.050
		growth	NOED	ingestion			307	307		
		mortality					307	307		
							410	410		
	golden shiner	behavior		absorption		adult	240	240		
			LOED				210	21		
Endrin Aldehyde (r)									164	0.030
Endrin Ketone (r)									164	0.022
gamma-BHC (Lindane) (a)	fathead minnow	mortality	NOED	water	carcass, eviscerated	immature - adult	9530	9530	600	0.0043
	rainbow trout				brain	immature	3000	3000		
					liver		2600	2600		
	brook trout				muscle	immature - adult	800	800		
							1200	1200		
							770	770		
	gudgeon				liver	NA	13	13		
							190	190		
					brain		150	150		
	bluegill				muscle	immature - adult	297	297		
gamma-Chlordane (r)									1660	0.0015
Heptachlor (b)	fathead minnow	mortality	NOED	water	carcass, eviscerated	fry - adult	17730	17730	6483	0.00039
	spot				whole body	immature	5300	5300		
					edible tissue		2900	2900		
Heptachlor Epoxide (a)	pinfish	mortality	NOED	combined	whole body	adult	3200	3200	3200	0.00080
Methoxychlor (a)	rainbow trout	mortality	NOED	water	whole body	immature	6070	6070	2374	0.011
							2800	2800		
							710	710		
	brook trout						2500	2500		
				diet			2500	2500		
Toxaphene (a)	brook trout	mortality, growth	NOED	water	whole body	adult	400	400	1794	0.14
		reproduction					200	200		
		mortality				embryo	400	400		
	fathead minnow	mortality, reproduction				adult	9600	9600		
		growth					2700	2700		
		mortality				fry	2800	2800		
		growth					400	400		
		mortality				embryo	1000	1000		
	channel catfish	mortality, growth, reproduction				adult	11000	11000		
		mortality, growth				fry	3400	3400		
							1900	1900		
		mortality				embryo	4400	4400		
		growth				immature	1200	1200		
							4600	4600		
							4000	4000		
Herbicides (ug/kg)										
2,4-D (a)	spiny dogfish	mortality	NOED	injection	whole body	NA	1000	1000	1000	0.013
2,4-DB										NV
2,4,5-T (a)	bluegill, carp	mortality	LC-50	NA	NA	NA	29800	298	298	0.042
2,4,5-TP (Silvex) (a)	channel catfish, bluegill, fathead minnow	mortality	LC-50	NA	NA	NA	50700	507	507	0.025
Dalapon (x)	bluegill	mortality	LC-50	water	NA	NA	105000	1050	1050	***2.9***
Dicamba										NV
Dichlorprop (u)	Not specified	mortality	LC-50	water	NA	NA	830	8.3	8.3	***18***
Dinoseb (w)	lake trout	mortality	LC-50	water	NA	NA	44	0.44	0.44	***1125***
MCPA (v)	rainbow trout	mortality	LC-50	water	NA	NA	232000	2320	2320	***1.3***
MCPP (a)	carp, bluegill, rainbow trout	mortality	LC-50	NA	NA	NA	574100	5741	5741	0.52

Table 7-65
Pond Fish Body Burden Hazard Quotients
Sauget, IL

Analyte	Species	Effect	Endpoint	Exposure Route	Body Part	Species Start Lifestage	Residue Conce. Wet	NOEL Equivalent Conc.	Calculated TRV Benchmark	HQ
PCBs (ug/kg)										
Decachlorobiphenyl (b)	rainbow trout	mortality	NOED	ingestion	whole body	adult	29	29	13	***1.9***
					muscle		6.0	6.0		
Dichlorobiphenyl (b)	rainbow trout	mortality	NOED	ingestion	whole body	adult	197	197	95	*0.053*
					muscle		52	52		
					whole body		164	164		
					muscle		48	48		
					whole body		175	175		
					muscle		51	51		
Heptachlorobiphenyl (a)	lake trout	survival	NOED	absorption	whole body	egg	0.035	0.035	0.035	**18286**
Hexachlorobiphenyl (b)	rainbow trout	mortality	NOED	ingestion	whole body	adult	86	86	226	**8.4**
					muscle		25	25		
					whole body		96	96		
					muscle		42	42		
					whole body		70	70		
					muscle		30	30		
		growth		diet	whole body	immature	18000	18000		
		mortality		ingestion	whole body	adult	89	89		
					muscle		40	40		
					whole body		92	92		
					muscle		45	45		
					whole body		79	79		
					muscle		31	31		
	channel catfish	mortality, growth		combined	whole body	immature	30	30		
	guppy	mortality		diet		adult	100000	100000		
	chinook salmon			water		fry	100000	100000		
	lake trout						840	840		
Monochlorobiphenyl							780	780		NV
Nonachlorobiphenyl (a)	rainbow trout	mortality	NOED	ingestion	whole body	adult	36	36	21	***1.2***
					muscle		12	12		
Octachlorobiphenyl (a)	rainbow trout	mortality	NOED	ingestion	whole body	adult	65	65	2028	0.042
					muscle		26	26		
	guppy	mortality		diet	whole body		100000	100000		
							100000	100000		
Pentachlorobiphenyl (a)	rainbow trout	mortality	NOED	ingestion	whole body	adult	82	82	45	**73**
					muscle		29	29		
					whole body		61	61		
					muscle		25	25		
					whole body		86	86		
					muscle		31	31		
					whole body		43	43		
					muscle		16	16		
					whole body		104	104		
					muscle		39	39		
					whole body		88	88		
					muscle		31	31		
Tetrachlorobiphenyl (a)	rainbow trout	mortality	NOED	ingestion	whole body	adult	89	89	215	**11**
					muscle		27	27		
					whole body		91	91		
					muscle		30	30		
		growth					82000	82000		
		mortality			whole body	adult	81	81		
					muscle		28	28		
					whole body		4200	4200		
					carcass		4800	4800		
					muscle		2700	2700		
					visceral fat		16900	16900		
					whole body		3720	3720		
					egg	fry	1000	1000		
					whole body	adult	90	90		
					muscle		28	28		
					whole body		92	92		
					muscle		28	28		
					whole body		91	91		
					muscle		28	28		
					whole body		87	87		
					muscle		30	30		
					whole body		87	87		
					muscle		28	28		
Trichlorobiphenyl (a)	rainbow trout	mortality	NOED	ingestion	whole body	adult	83	83	48	**2.5**
					muscle		23	23		
					whole body		96	96		
					muscle		30	30		
Total PCBs										NV

Table 7-65
Pond Fish Body Burden Hazard Quotients
Sauget, IL

Analyte	Species	Effect	Endpoint	Exposure Route	Body Part	Species Start Lifestage	Residue Conce. Wet	NOEL Equivalent Conc.	Calculated TRV Benchmark	HQ
Dioxins/Furans (pg/g)										
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin (a)	rainbow trout	biochemical	LOED	ingestion	liver	adult	190	19	19	**1.3**
1,2,3,4,6,7,8-HpCDF (s)	lake trout	survival	NOED	absorption	whole body	egg	0.035	0.035	0.035	***12***
1,2,3,4,7,8,9-HpCDF (s)	lake trout	survival	NOED	absorption	whole body	egg	0.035	0.035	0.035	***16***
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin (a)	rainbow trout	biochemical	LOED	ingestion	liver	adult	0.039 0.039	0.0039 0.0039	0.039	***24***
1,2,3,4,7,8-HxCDF (a)	rainbow trout	mortality	LD50	injection	whole body	fry	0.99	0.0099	0.0099	***41***
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin (a)	rainbow trout	mortality, growth	NOED	water	liver	immature	10	10	10	0.11
1,2,3,6,7,8-HxCDF (s)	lake trout	survival	NOED	absorption	whole body	egg	0.035	0.035	0.035	***9.4***
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin (s)	lake trout	survival	NOED	absorption	whole body	egg	0.035	0.035	0.035	***23***
1,2,3,7,8,9-HxCDF (s)	lake trout	survival	NOED	absorption	whole body	egg	0.035	0.035	0.035	***16***
1,2,3,7,8-Pentachlorodibenzofuran (a)	rainbow trout	mortality	LD50	injection	whole body	fry	7.3	0.073	0.0734	***16***
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin (a)	rainbow trout	mortality	LD50	injection	whole body	fry	0.57	0.0057	0.00566	***194***
2,3,4,6,7,8-HxCDF (s)	lake trout	survival	NOED	absorption	whole body	egg	0.035	0.035	0.035	***12***
2,3,4,7,8-PeCDF (a)	rainbow trout	mortality	LD50	injection	whole body	fry	0.70	0.0070	0.10	***20***
		growth	NOED	water		juvenile	1.5	1.5		
2,3,7,8-TCDD (a)	black bullhead	mortality	NOED	injection	whole body	NA	1.0	1.0	2.7	0.52
	bluegill						1.0	1.0		
	channel catfish			combined		adult	140	140		
	common carp			injection		NA	1.0	1.0		
	largemouth bass						1.0	1.0		
2,3,7,8-Tetrachlorodibenzofuran (a)	rainbow trout	growth	NOED	combined	whole body	immature	0.090	0.090	0.47	**118**
				ingestion		juvenile	2.5	2.5		
OCDD (s)	lake trout	survival	NOED	absorption	whole body	egg	0.035	0.035	0.035	**1429**
OCDF (a)	atlantic salmon	mortality	NOED	ingestion	muscle	immature	10	10	14	0.060
					digestive tract		20	20		
Total HpCDD										NV
Total HpCDF										NV
Total HxCDD										NV
Total HxCDF										NV
Total PeCDD										NV
Total PeCDF										NV
Total TCDD										NV
Total TCDF										NV
Metals (mg/kg)										
Aluminum (a)	rainbow trout	mortality	NOED	ingestion	muscle	juvenile	1.2	1.2	4.2	**3.8**
					liver		4.4	4.4		
					kidney		5.1	5.1		
					gill		6.1	6.1		
					whole body		8.5	8.5		
Antimony (b,t)	rainbow trout	survival	NOED	water	whole body	fingerling	5000	5000	5000	0.00018
Arsenic (a)	bluegill	reproduction	NOED	combined	whole body	adult	0.53	0.53	17	0.044
					fillet		0.49	0.49		
		mortality			digestive tract		18	18		
					gill		18	18		
					liver		12	12		
					ovary		8.4	8.4		
					kidney		5.9	5.9		
					whole body		5.5	5.5		
					fillet		3.2	3.2		
		biochemical					5.0	5.0		
		growth			digestive tract		18	18		
		mortality			whole body	juvenile	1.8	1.8		
		biochemical				adult	12	12		
		growth			gill		18	18		
					liver		12	12		
		mortality		absorption	whole body	immature	0.52	0.52		
		growth		combined	ovary	adult	8.4	8.4		
					kidney		5.9	5.9		
					whole body		5.5	5.5		
					fillet		3.2	3.2		
					whole body	juvenile	1.8	1.8		
Barium										NV
Beryllium (a)	bluegill	mortality	NOED	injection	whole body	immature	5.1	5.1	5.1	0.070
Cadmium (a)	bluegill	mortality	NOED	water	gill	1-yr old	34	34	8.3	0.027
					liver		201	201		
					kidney		188	188		
					intestine		73	73		
				absorption	gill	immature	26	26		
		growth		water	whole body	juvenile	0.52	0.52		
							0.52	0.52		
		mortality					0.52	0.52		
		survival					0.52	0.52		

Table 7-65
Pond Fish Body Burden Hazard Quotients
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Analyte	Species	Effect	Endpoint	Exposure Route	Body Part	Species Start Lifestage	Residue Conce. Wet	NOEL Equivalent Conc.	Calculated TRV Benchmark	HQ
Calcium										NV
Cobalt										NV
Copper (a)	bluegill	survival	NOED	water	gill	juvenile	12	12	16	0.057
					liver		57	57		
		reproduction		combined		immature	57	57		
					kidney		12	12		
		mortality			gill		6.0	6.0		
					liver		57	57		
		survival		water	kidney	juvenile	12	12		
		growth		combined	liver	immature	6.0	6.0		
				water		juvenile	57	57		
					kidney		6.0	6.0		
				combined		immature	12	12		
		mortality			gill		6.0	6.0		
							6.0	6.0		
		reproduction		water	liver	juvenile	57	57		
					gill		12	12		
		growth			kidney		6.0	6.0		
					gill		12	12		
					liver		57	57		
Iron										NV
Lead (a)	brook trout	reproduction	NOED	water	kidney	start life stage	100	100	12	0.019
		survival					100	100		
					gill	yearling	80	80		
		mortality		absorption	red blood cells		4.0	4.0		
		survival		water		immature	54	54		
		mortality		absorption	kidney	yearling	36	36		
					gill	egg-embryo	20	20		
					liver		20	20		
						immature	10	10		
					kidney	egg-embryo	100	100		
					whole body	immature	4.0	4.0		
		reproduction			muscle	egg-embryo	0.60	0.60		
		mortality			gonad	immature	3.2	3.2		
					muscle		0.60	0.60		
		morphology			whole body		2.5	2.5		
		growth			kidney	egg-embryo	100	100		
		survival		water	liver	immature	16	16		
		growth		absorption	gill	yearling	36	36		
		mortality			spleen	egg-embryo	6.0	6.0		
		reproduction			kidney	immature	36	36		
		growth		water	whole body	egg-embryo	4.0	4.0		
					liver	egg	16	16		
					red blood cells	yearling	54	54		
					gill		80	80		
					kidney		100	100		
		mortality		absorption	gill	immature	70	70		
		reproduction					70	70		
		growth			kidney		36	36		
		reproduction			gill	egg-embryo	20	20		
					liver		20	20		
						immature	10	10		
					spleen	egg-embryo	6.0	6.0		
					red blood cells	immature	4.0	4.0		
					gonad		3.2	3.2		
					kidney		100	100		
		survival		water	eggs		4.0	4.0		
		reproduction			gill	egg	80	80		
					red blood cells	yearling	54	54		
					liver		16	16		
					eggs		0.40	0.40		
		growth		absorption	gill	egg	70	70		
					liver	immature	20	20		
					muscle		0.60	0.60		
					liver		10	10		
					spleen	egg-embryo	6.0	6.0		
					red blood cells	immature	4.0	4.0		
					gonad		3.2	3.2		
					whole body		2.6	2.6		
		development			eggs	egg-embryo	0.34	0.34		
	fathead minnow	biochemical			whole body	juvenile	44	44		
							26	26		
					brain		0.82	0.82		
							0.45	0.45		

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Pond Fish Body Burden Hazard Quotients
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Analyte	Species	Effect	Endpoint	Exposure Route	Body Part	Species Start Lifestage	Residue Conce. Wet	NOEL Equivalent Conc.	Calculated TRV Benchmark	HQ
Magnesium										NV
Manganese										NV
Mercury (a)	goldfish	mortality	NOED	absorption	whole body	adult	6.2	6.2	1.7	0.037
	guppy						0.20	0.20		
	rainbow trout				fillet	fry	1.2	1.2		
							1.4	1.4		
							1.6	1.6		
		physiological					0.70	0.70		
							2.4	2.4		
							1.5	1.5		
				water	whole body	NA	12	12		
		survival					12	12		
							12	12		
	fathead minnow	behavior				embryo	11	11		
		growth					11	11		
		morphology					11	11		
		survival					11	11		
	rainbow trout	growth		combined		juvenile	0.99	0.99		
				water			2.3	2.3		
				combined			3.0	3.0		
		behavior	LOED	absorption	carcass	immature	1.2	1.2		
		mortality					4.8	4.8		
		behavior		ingestion	muscle	fingerling	27	27		
		biochemical					12	12		
		cellular					27	27		
		growth					12	12		
		morphology					27	27		
		mortality					27	27		
	fathead minnow	growth		combined	whole body	adult	0.32	0.32		
							0.32	0.32		
							0.80	0.80		
							2.6	2.6		
							9.4	9.4		
		morphology					2.8	2.8		
		mortality					2.8	2.8		
							7.6	7.6		
	yellow perch	growth					0.14	0.14		
	rainbow trout	mortality	NOED	ingestion	brain	immature	0.10	0.10		
					blood		0.10	0.10		
					gill		0.10	0.10		
					liver		0.10	0.10		
					muscle		0.10	0.10		
					whole body		0.14	0.14		
					kidney		0.30	0.30		
					spleen		0.30	0.30		
					gill		0.40	0.40		
					whole body		0.47	0.47		
					muscle		0.50	0.50		
					brain		0.50	0.50		
					liver		1.1	1.1		
					spleen		1.3	1.3		
					kidney		1.5	1.5		
					posterior intestine		1.5	1.5		
					blood		1.5	1.5		
					posterior intestine		5.9	5.9		

Table 7-65
Pond Fish Body Burden Hazard Quotients
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Analyte	Species	Effect	Endpoint	Exposure Route	Body Part	Species Start Lifestage	Residue Conce. Wet	NOEL Equivalent Conc.	Calculated TRV Benchmark	HQ
Nickel (a)	rainbow trout	survival	NOED	water	muscle	adult	0.82	0.82	27	0.066
					kidney		4.0	4.0		
					liver		2.9	2.9		
	common carp				gill	immature	48	48		
					kidney		65	65		
					liver		51	51		
					brain		36	36		
					white muscle		47	47		
					gill		103	103		
					kidney		80	80		
					liver		97	97		
					brain		41	41		
					white muscle		58	58		
Potassium										NV
Selenium (a)	bluegill	mortality	NOED	ingestion	muscle	juvenile	1.9	1.9	2.9	0.16
		reproduction		water	whole body	adult	0.62	0.62		
					ovary		0.66	0.66		
							0.66	0.66		
							6.7	6.7		
							6.7	6.7		
							6.7	6.7		
							6.7	6.7		
							6.7	6.7		
		mortality		ingestion	whole body	juvenile	0.50	0.50		
							0.66	0.66		
		physiological					2.2	2.2		
		survival		water			0.90	0.90		
		growth		combined		adult	0.80	0.80		
		physiological					3.2	3.2		
							3.6	3.6		
							3.2	3.2		
							3.2	3.2		
							3.6	3.6		
		reproduction					3.6	3.6		
							3.6	3.6		
							3.6	3.6		
		survival					3.6	3.6		
		mortality			skeletal muscle		1.8	1.8		
					testis		3.0	3.0		
					ovary		4.4	4.4		
					liver		9.3	9.3		
				absorption	whole body	immature	2.4	2.4		
		cellular		combined			1.6	1.6		
		growth					1.2	1.2		
							1.6	1.6		
		mortality		absorption	brain		0.50	0.50		
					stomach		1.3	1.3		
					intestine		2.3	2.3		
					gonad		2.4	2.4		
					plasma		2.9	2.9		
					white muscle		3.0	3.0		
					whole body		4.7	4.7		
					gill		8.3	8.3		
					red blood cells		8.6	8.6		
					kdney		11	11		
					liver		12	12		
					heart		15	15		
					spleen		19	19		
Silver (a)	bluegill	mortality	NOED	water	whole body	juvenile	0.12	0.12	0.061	***7.4***
		growth					0.044	0.044		
		mortality					0.044	0.044		

Table 7-65
Pond Fish Body Burden Hazard Quotients
Sauget, IL

Analyte	Species	Effect	Endpoint	Exposure Route	Body Part	Species Start Lifestage	Residue Conce. Wet	NOEL Equivalent Conc.	Calculated TRV Benchmark	HQ
Sodium										NV
Thallium (a)	bluegill	mortality	NOED	absorption	whole body	immature	2.7	2.7	2.7	0.33
Vanadium (a)	rainbow trout	mortality	NOED	ingestion	liver	immature	9.6	0.96	2.3	0.20
					carcass		5.3	5.3		
Zinc (a)	brook trout	growth	NOED	water	kidney	juvenile	42	42	51	0.0089
					gill		64	64		
					liver		68	68		
		reproduction			kidney		42	42		
					gill		64	64		
					liver		68	68		
		survival			kidney		42	42		
					gill		64	64		
					liver		68	68		
	guppy	mortality		combined	whole body	immature	0.28	0.28		
	American flagfish	growth					190	190		
							230	230		
		mortality					220	220		
							300	300		
		growth					58	58		
		mortality					50	50		
		reproduction					58	58		
	brook trout	growth		absorption	kidney	egg-embryo	40	40		
					gill		60	60		
					liver		60	60		
		mortality			whole body		3.9	3.9		
					gill	immature	60	60		
					liver		60	60		
					kidney		60	60		
		reproduction					40	40		
					gill		60	60		
					liver		60	60		

NOTES:
NA = Not available
NV = no TRV was found for this compound
Bolded/italicized values indicate HQs = to or exceeding 1 for adjusted non-detected concentrations.
Bolded/shaded values indicate HQs = to or exceeding 1 for detected concentrations.

a - USACOE-ERAD, 2003
b- Jarvinen and Ankley, 1999
c - based on 1-Methylnaphthalene
d - Lu and Metcalf, 1975.
e - based on 4-nitrophenol
f- Freitag *et al* ., 1985.
g - based on 4-methylphenol
h - based on 4-chloro-o-cresol
i - based on anthracene
j - Barrows *et al* ., 1980
k - based on benzo(ghi)perylene
l - based on dimethylphthalate
m - Spehar *et al* ., 1979
n - Oliver and Niimi, 1983
o- Metcalf, 1974
p - Canton *et al.* , 1978
q - Schimmel *et al* ., 1976
r - based on alpha-chlordane
s - Cook *et al* ., 1991; Van den Berg *et al* ., 1998
t - antimony potassium tartrate
u - USDA, 2003
v - Pesticide Information Profile, 1993c
w - Pesticide Information Profile, 1993b
x - Pesticide Information Profile, 1993a

Table 7-66
COPECs for the Pond
Sauget, IL

Large Pond Sediment HQs	Small Pond Sediment HQs	Large Pond Surface Water HQs	Small Pond Surface Water HQs	Fish HQs
bis(2-Ethylhexyl)phthalate	Dioxins/furans	Aluminum	Benzo(a)pyrene	Dalapon
Dioxins/furans	Copper	Barium	Barium	Dichloroprop
Cadmium	Lead			Dinoseb
Lead	Nickel			MCPA
				PCBs
				Dioxins/furans
				Aluminum

NOTES:
Analytes listed are only for those exceeding their benchmark/TRV, based on detected values.
Shaded entries are for those compounds that are COPECs for all receptors and all concentrations.

Table 7-67
Summary of Surface Water and Sediment Toxicity Testing for Large Pond
Sauget, IL

Sample ID	Surface Water Toxicity Test Species					
	P. promelas					
	Mean Acute Survival % Sample Value/Control Value	Is Mean Acute Survival Acceptable	Mean Chronic Survival % Sample Value/Control Value	Is Mean Chronic Survival Acceptable	Mean Growth % Sample Value/Control Value	Is Mean Growth Acceptable
L Pond 1	95%	Yes	87%	Yes	108%	Yes
L Pond 2	105%	Yes	100%	Yes	111%	Yes
L Pond 3	98%	Yes	98%	Yes	103%	Yes

Sample ID	Surface Water Toxicity Test Species					
	C. dubia					
	Mean Acute Survival % Sample Value/Control Value	Is Mean Acute Survival Acceptable	Mean Chronic Survival % Sample Value/Control Value	Is Mean Chronic Survival Acceptable	Mean Neonate Production % Sample Value/Control Value	Is Mean Neonate Production Acceptable
L Pond 1	100%	Yes	100%	Yes	113%	Yes
L Pond 2	100%	Yes	90%	Yes	108%	Yes
L Pond 3	100%	Yes	100%	Yes	104%	Yes

Sample ID	Sediment Toxicity Test Species			
	H. azteca			
	Mean Survival % Sample Value/Control Value	Is Mean Survival Acceptable	Mean Growth % Sample Value/Control Value	Is Mean Growth Acceptable
L Pond 1	94%	Yes	136%	Yes
L Pond 2	100%	Yes	129%	Yes
L Pond 3	101%	Yes	114%	Yes

Sample ID	Sediment Toxicity Test Species			
	C. tentans			
	Mean Survival % Sample Value/Control Value	Is Mean Survival Acceptable	Mean Growth % Sample Value/Control Value	Is Mean Growth Acceptable
L Pond 1	106%	Yes	103%	Yes
L Pond 2	102%	Yes	102%	Yes
L Pond 3	109%	Yes	101%	Yes

Sample ID	Sediment Toxicity Test Species	
	C. fluminea	
	Mean Survival % Sample Value/Control Value	Is Mean Survival Acceptable
L Pond 1	94%	Yes
L Pond 2	98%	Yes
L Pond 3	101%	Yes

Table 7-68
Summary of Surface Water and Sediment Toxicity Testing for Small Pond
Sauget, IL

Sample ID	Surface Water Toxicity Test Species					
	P. promelas					
	Mean Acute Survival % Sample Value/Control Value	Is Mean Acute Survival Acceptable	Mean Chronic Survival % Sample Value/Control Value	Is Mean Chronic Survival Acceptable	Mean Growth % Sample Value/Control Value	Is Mean Growth Acceptable
S Pond 1	100%	Yes	98%	Yes	110%	Yes
S Pond 2	95%	Yes	98%	Yes	117%	Yes
S Pond 3	83%	No	87%	Yes	121%	Yes

Sample ID	Surface Water Toxicity Test Species					
	C. dubia					
	Mean Acute Survival % Sample Value/Control Value	Is Mean Acute Survival Acceptable	Mean Chronic Survival % Sample Value/Control Value	Is Mean Chronic Survival Acceptable	Mean Neonate Production % Sample Value/Control Value	Is Mean Neonate Production Acceptable
S Pond 1	100%	Yes	100%	Yes	148%	Yes
S Pond 2	100%	Yes	100%	Yes	115%	Yes
S Pond 3	100%	Yes	100%	Yes	107%	Yes

Sample ID	Sediment Toxicity Test Species			
	H. azteca			
	Mean Survival % Sample Value/Control Value	Is Mean Survival Acceptable	Mean Growth % Sample Value/Control Value	Is Mean Growth Acceptable
S Pond 1	12%	No	86%	Yes
S Pond 2	54%	No	46%	No
S Pond 3	84%	Yes	64%	No

Sample ID	Sediment Toxicity Test Species			
	C. tentans			
	Mean Survival % Sample Value/Control Value	Is Mean Survival Acceptable	Mean Growth % Sample Value/Control Value	Is Mean Growth Acceptable
S Pond 1	0%	No	0%	No
S Pond 2	62%	No	63%	No
S Pond 3	104%	Yes	90%	Yes

Sample ID	Sediment Toxicity Test Species	
	C. fluminea	
	Mean Survival % Sample Value/Control Value	Is Mean Survival Acceptable
S Pond 1	96%	Yes
S Pond 2	102%	Yes
S Pond 3	98%	Yes

FIGURES

Figure 2–1 Site Layout Map
Sauget Area 2, Sauget, Illinois

amec EARTH & ENVIRONMENTAL, INC.
285 Davidson Avenue, Suite 405
Somerset, NJ 08873

Project Number:
1–7305–0000

Source:
URS

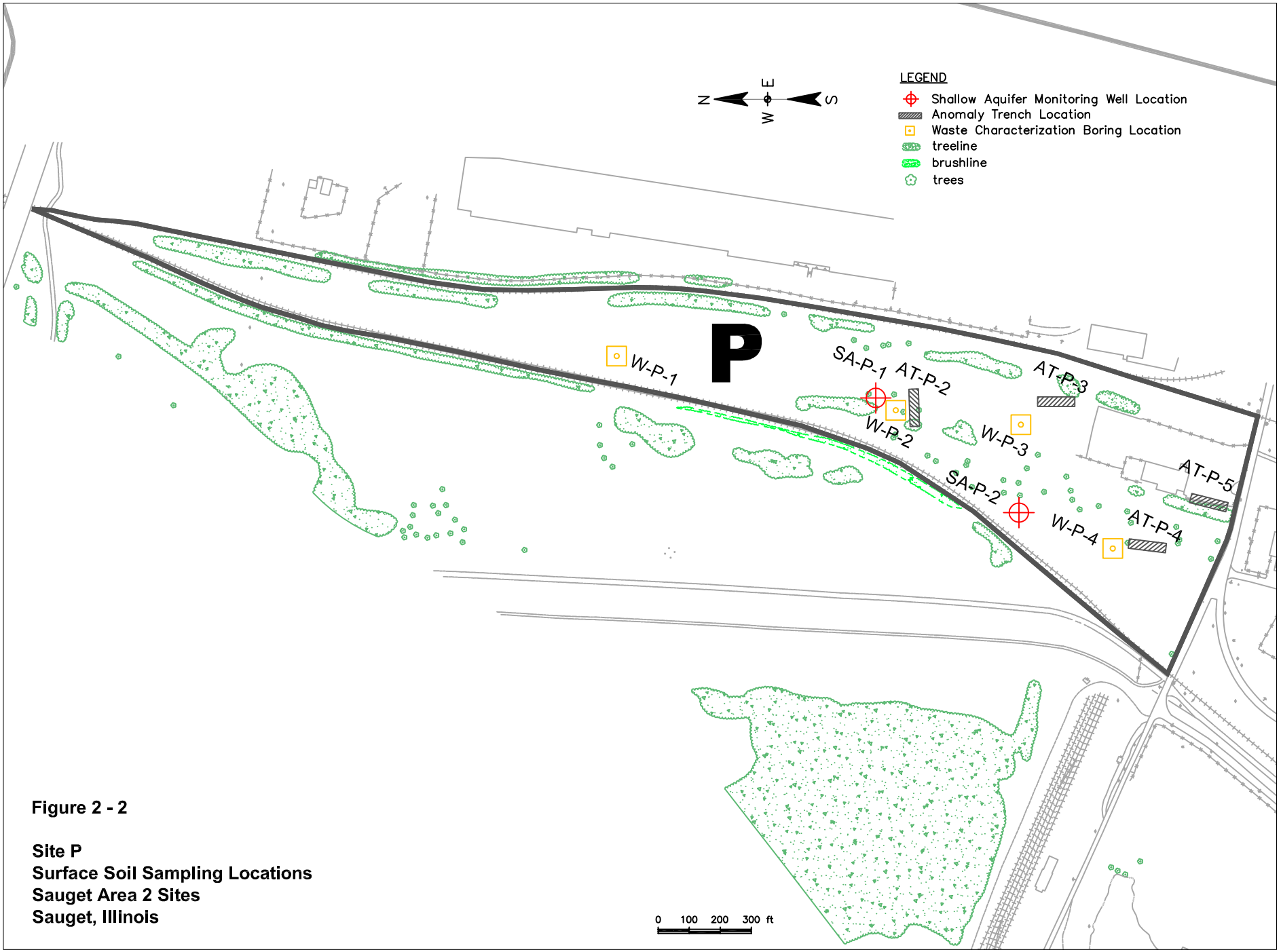


Figure 2 - 2

Site P
Surface Soil Sampling Locations
Sauget Area 2 Sites
Sauget, Illinois

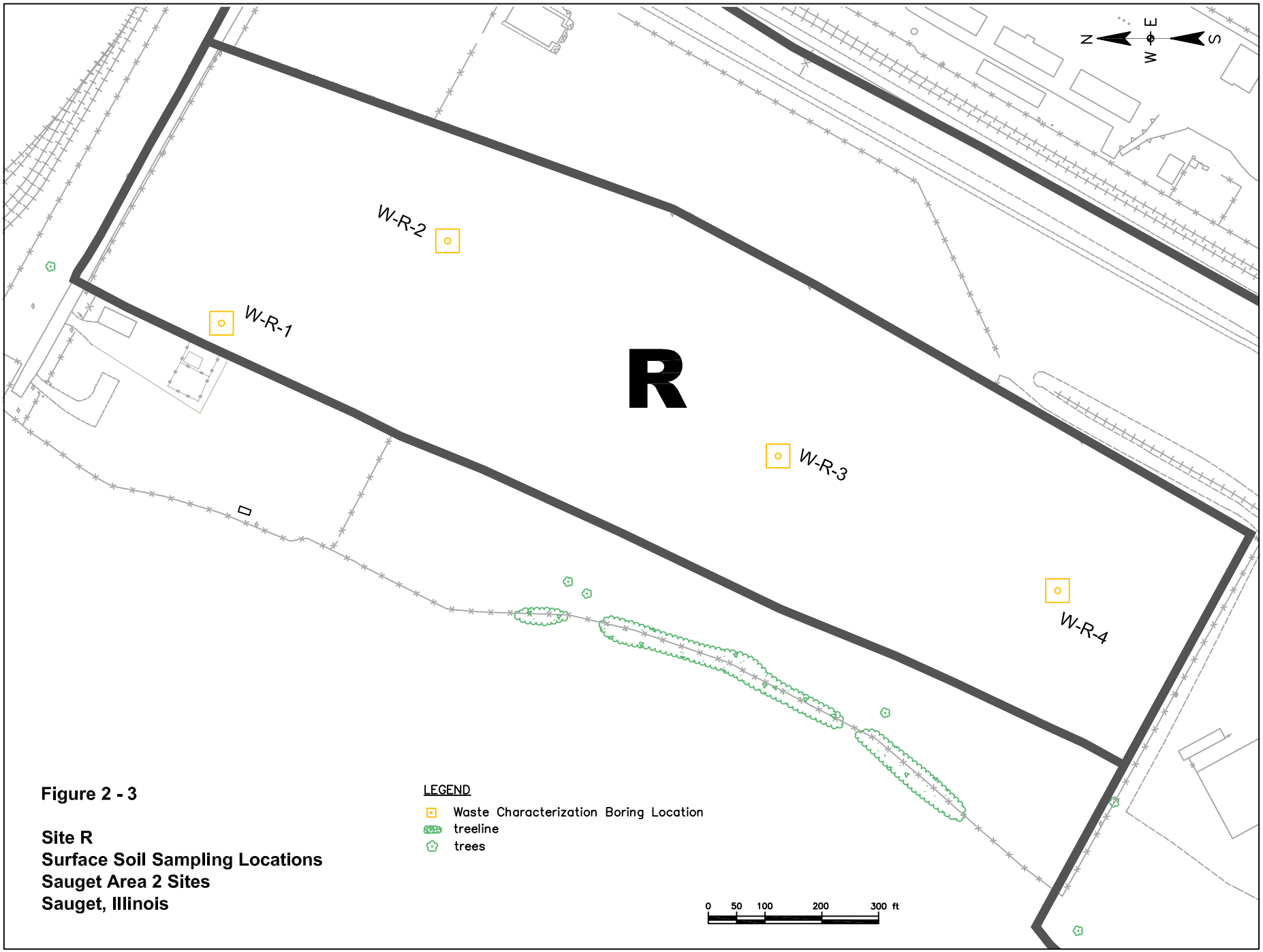


Figure 2 - 3

Site R
Surface Soil Sampling Locations
Sauget Area 2 Sites
Sauget, Illinois

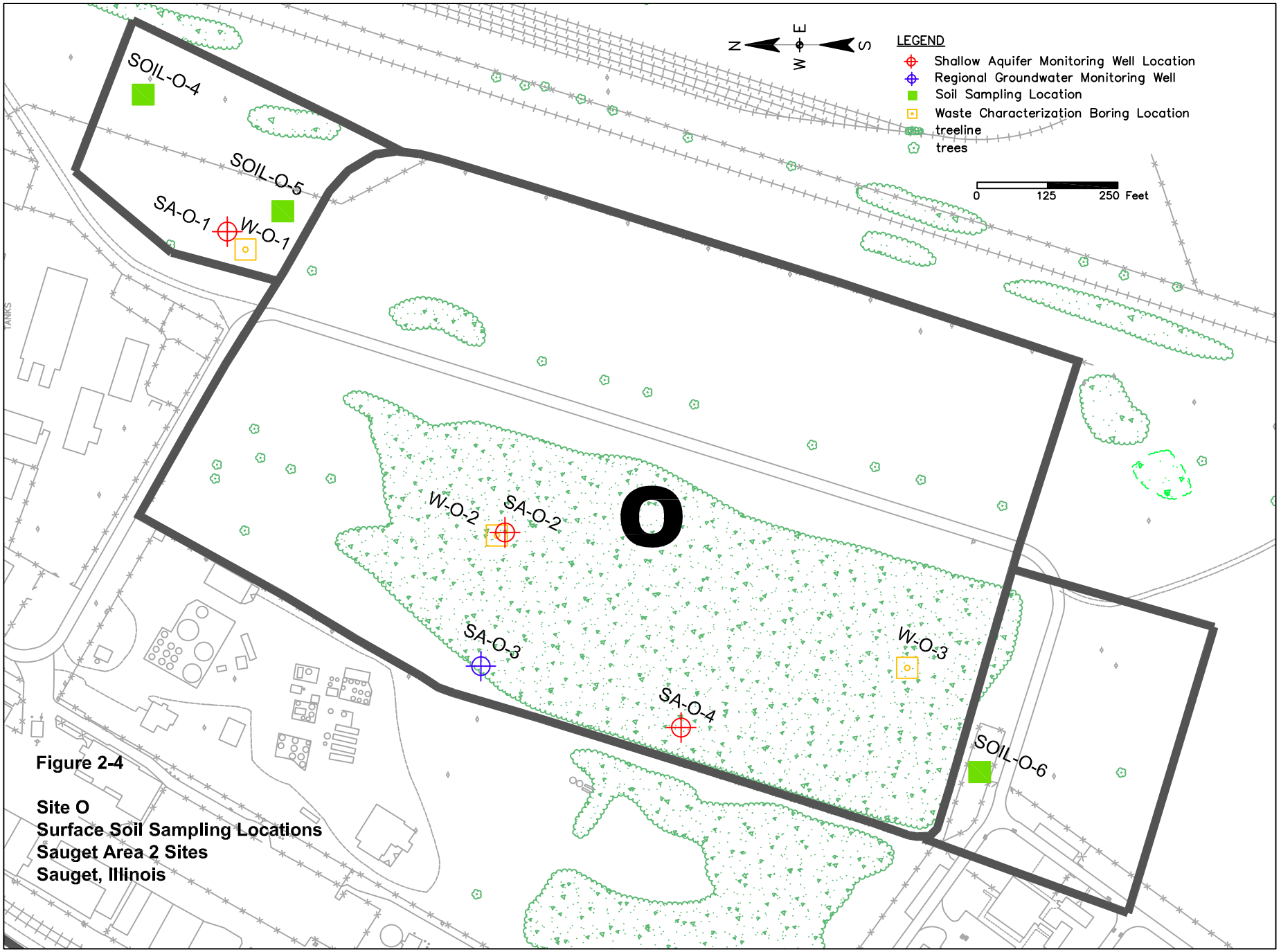


Figure 2-4

Site O
Surface Soil Sampling Locations
Sauget Area 2 Sites
Sauget, Illinois

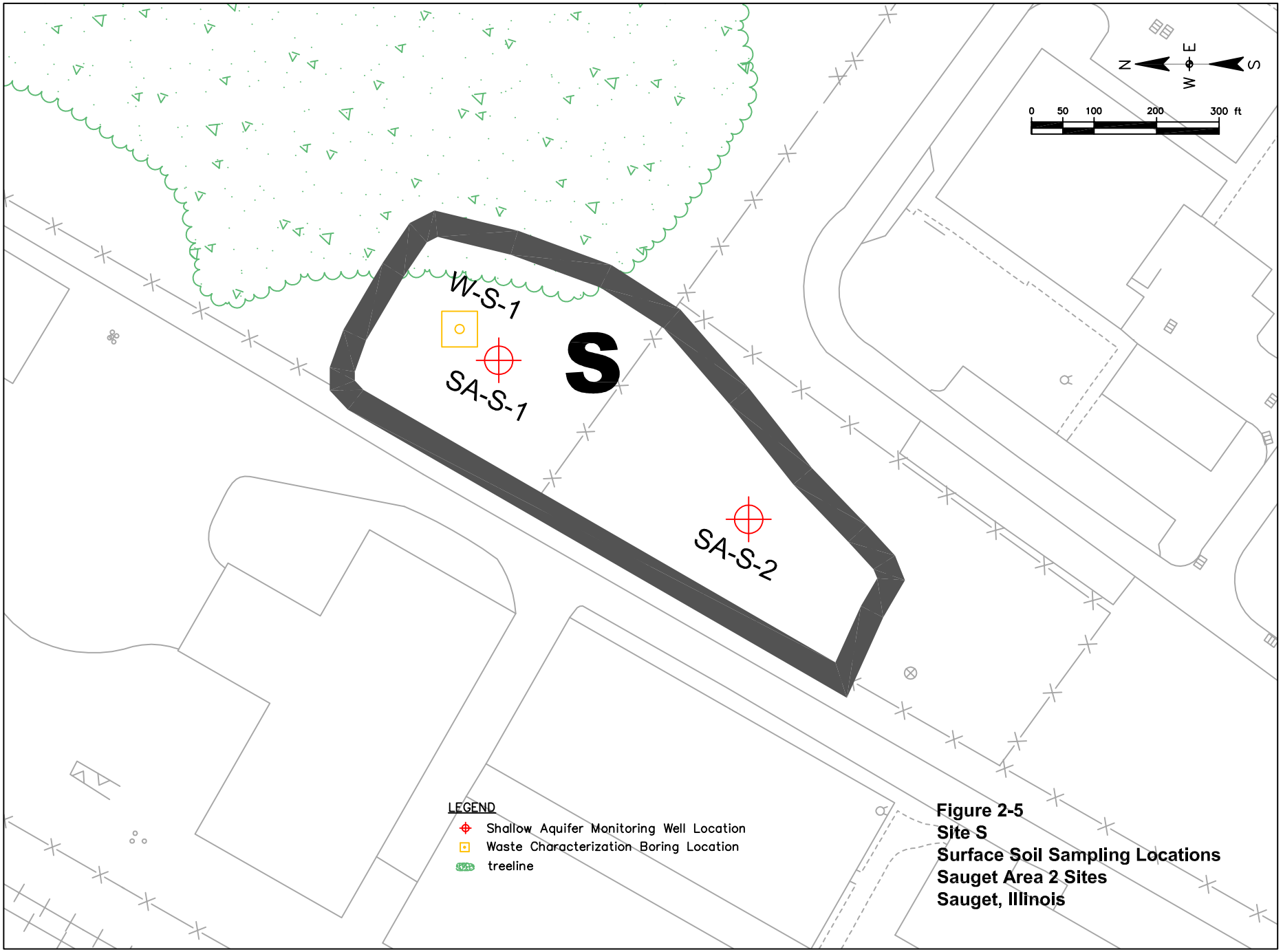


Figure 2-5
Site S
Surface Soil Sampling Locations
Sauget Area 2 Sites
Sauget, Illinois

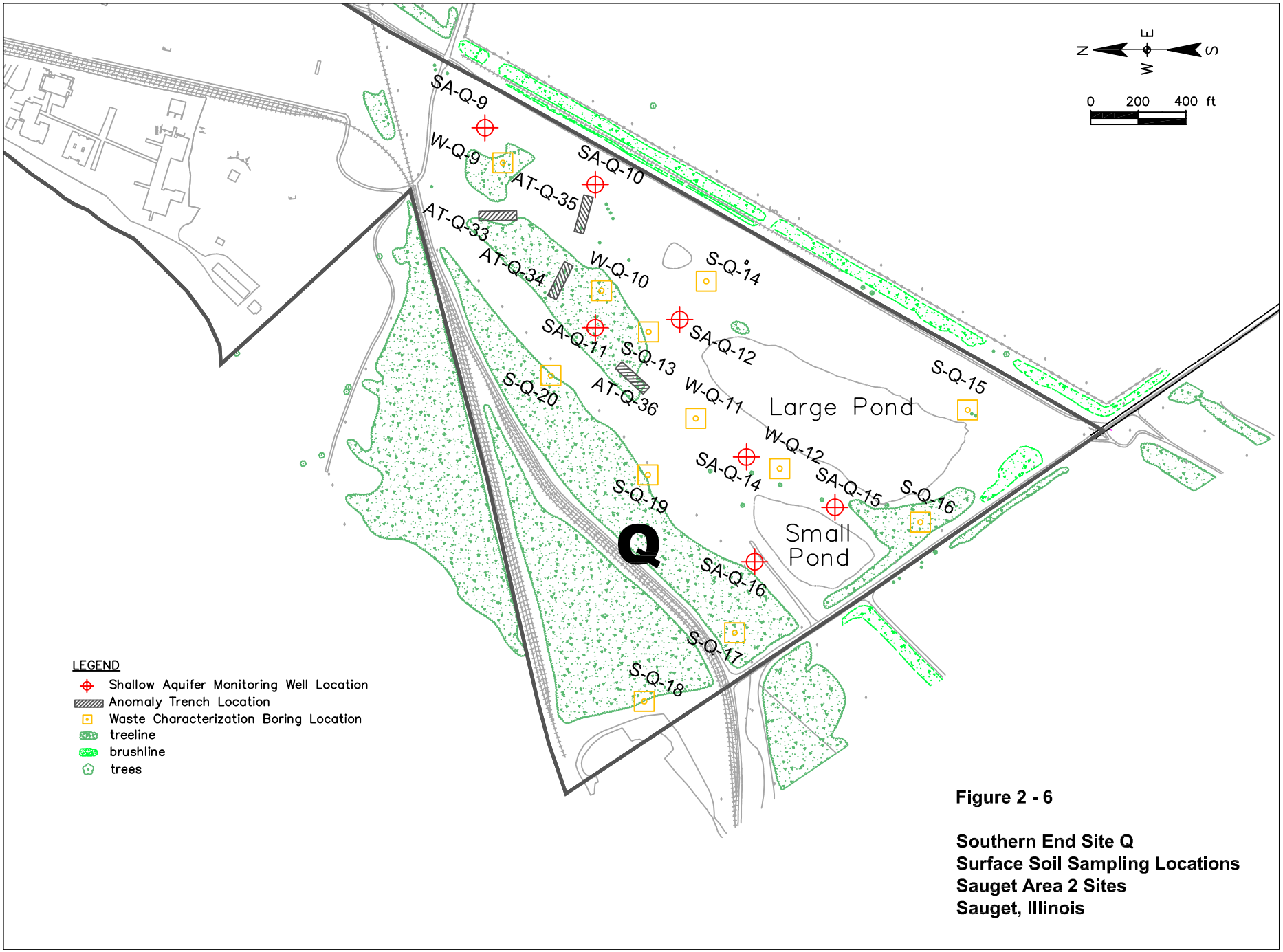


Figure 2 - 6

Southern End Site Q
Surface Soil Sampling Locations
Sauget Area 2 Sites
Sauget, Illinois

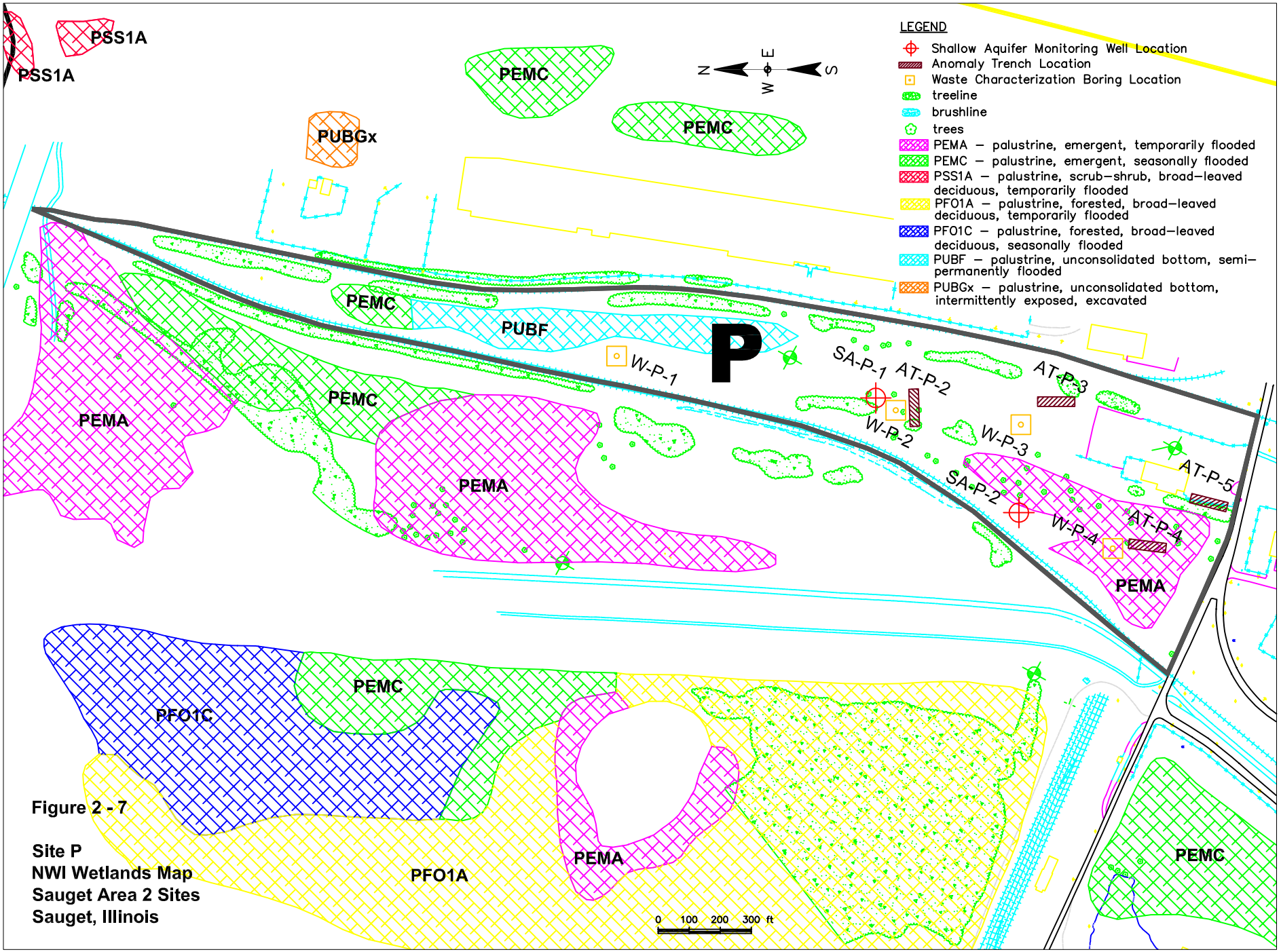


Figure 2 - 7

Site P
NWI Wetlands Map
Sauget Area 2 Sites
Sauget, Illinois

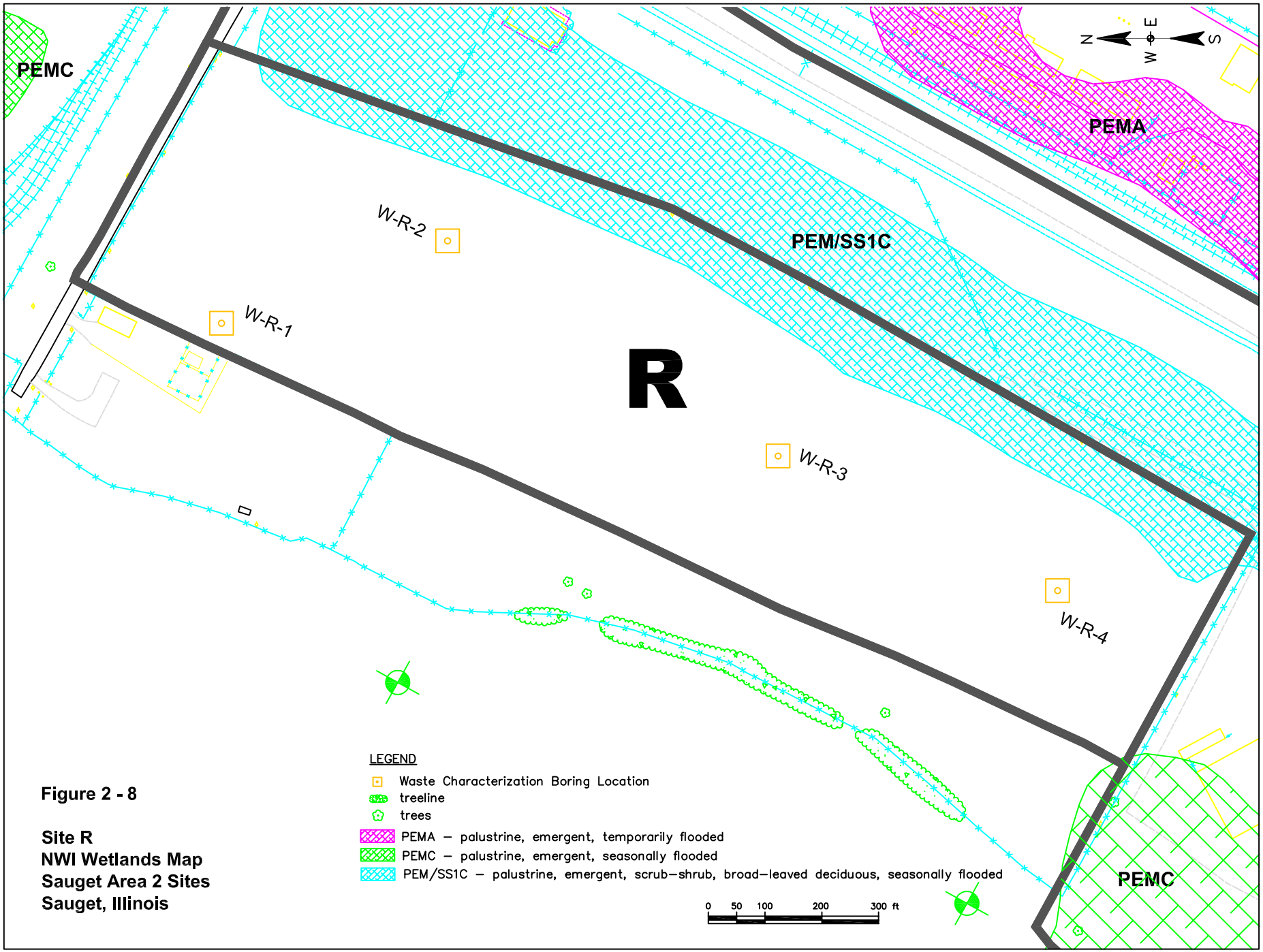


Figure 2 - 8

Site R
NWI Wetlands Map
Sauget Area 2 Sites
Sauget, Illinois

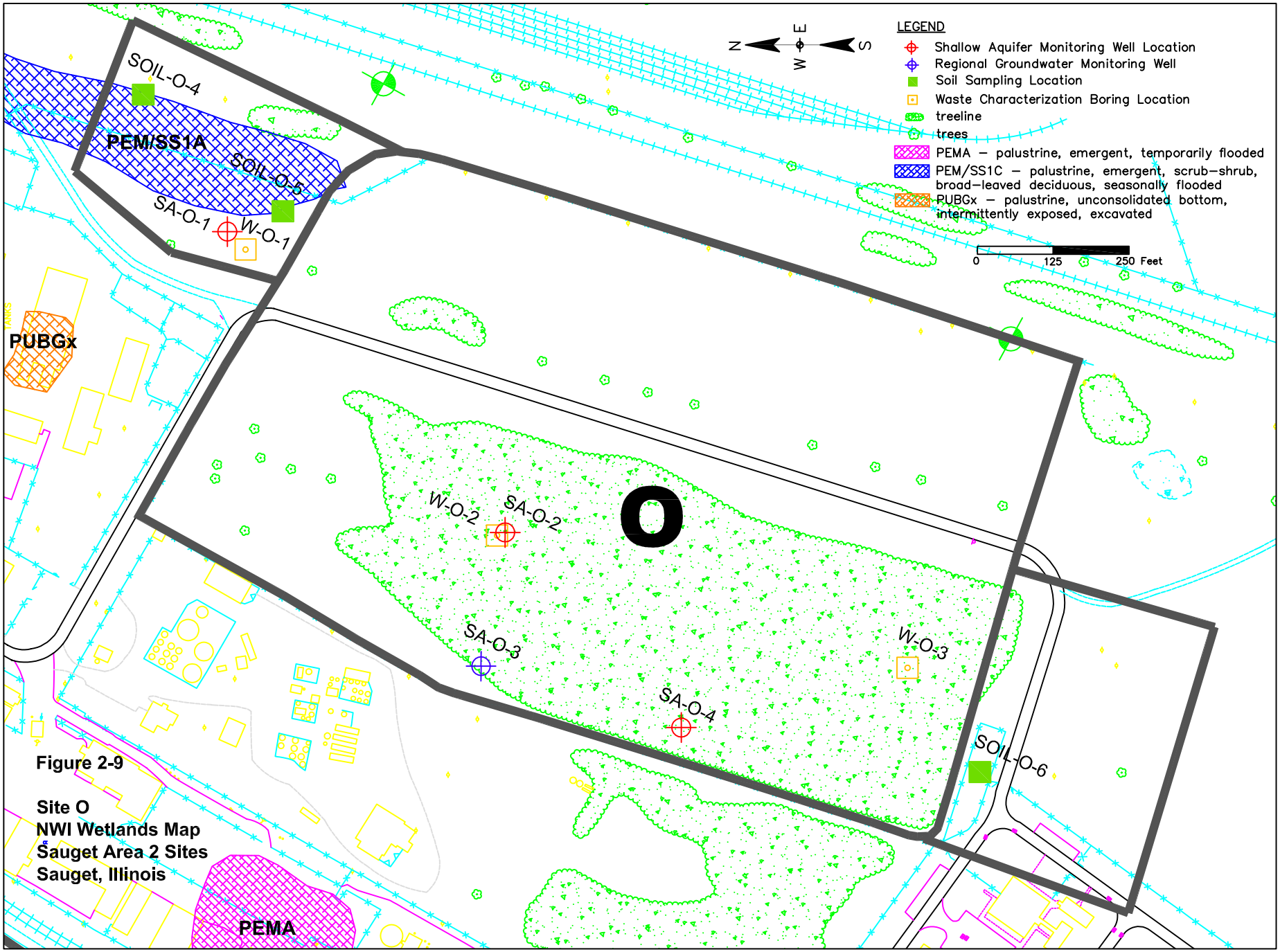


Figure 2-9

Site O
NWI Wetlands Map
Sauget Area 2 Sites
Sauget, Illinois

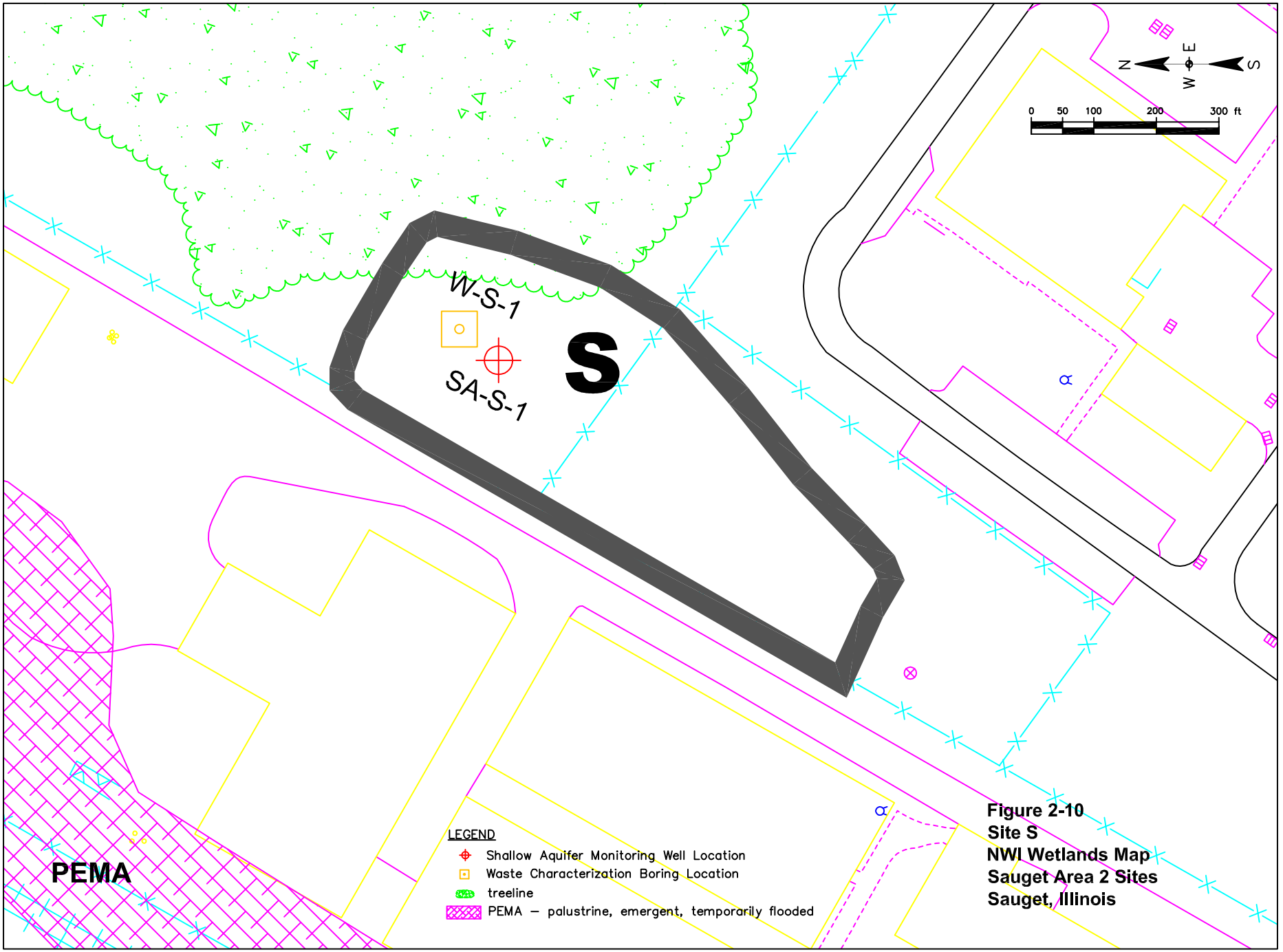


Figure 2-10
Site S
NWI Wetlands Map
Sauget Area 2 Sites
Sauget, Illinois

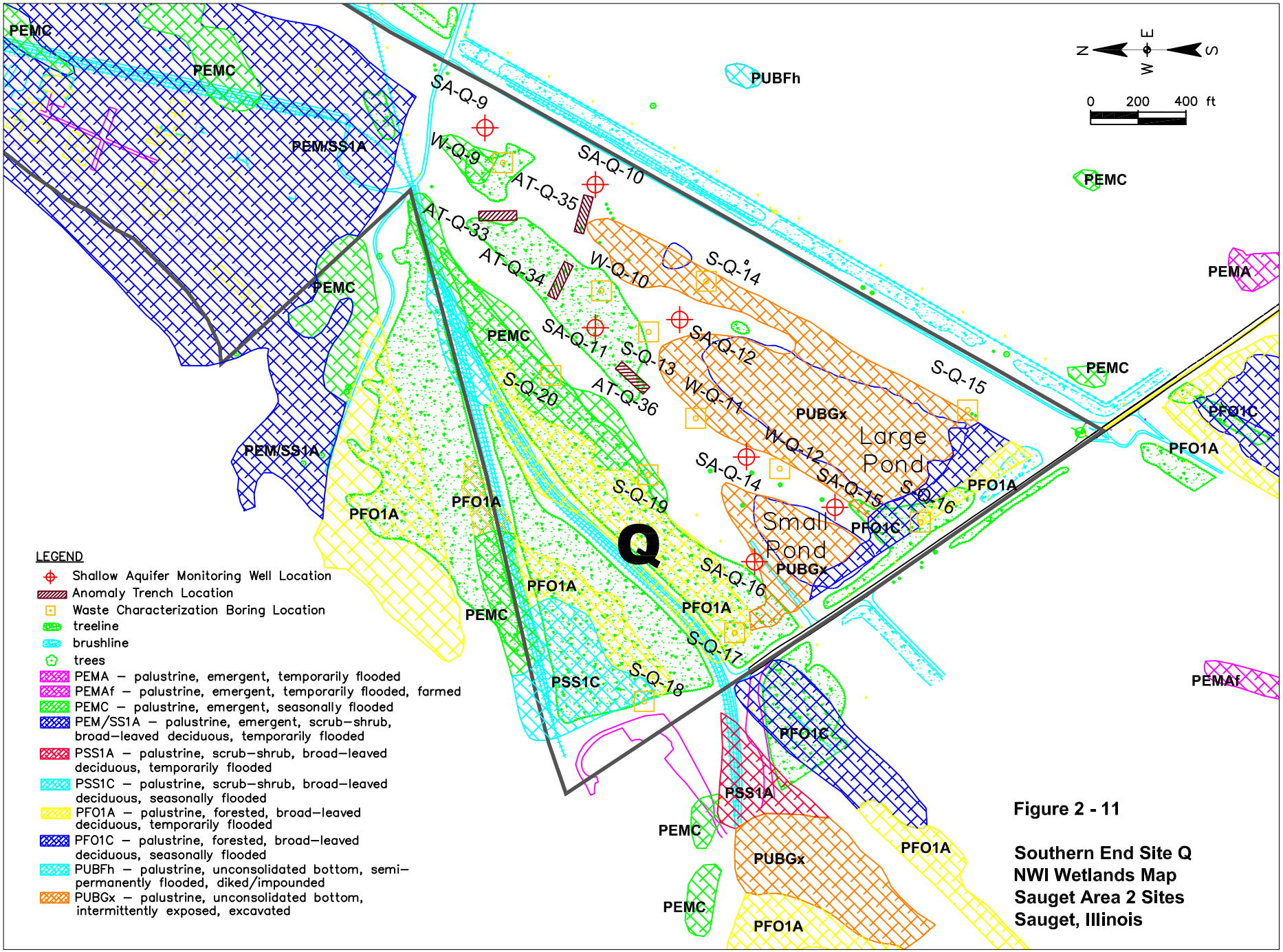


Figure 2 - 11

Southern End Site Q
NWI Wetlands Map
Sauget Area 2 Sites
Sauget, Illinois

Figure 2-12
Conceptual Site Model for the Aquatic Assessment
Sauget Area 2 RI/FS SSP
Sauget Area 2 Sites Group

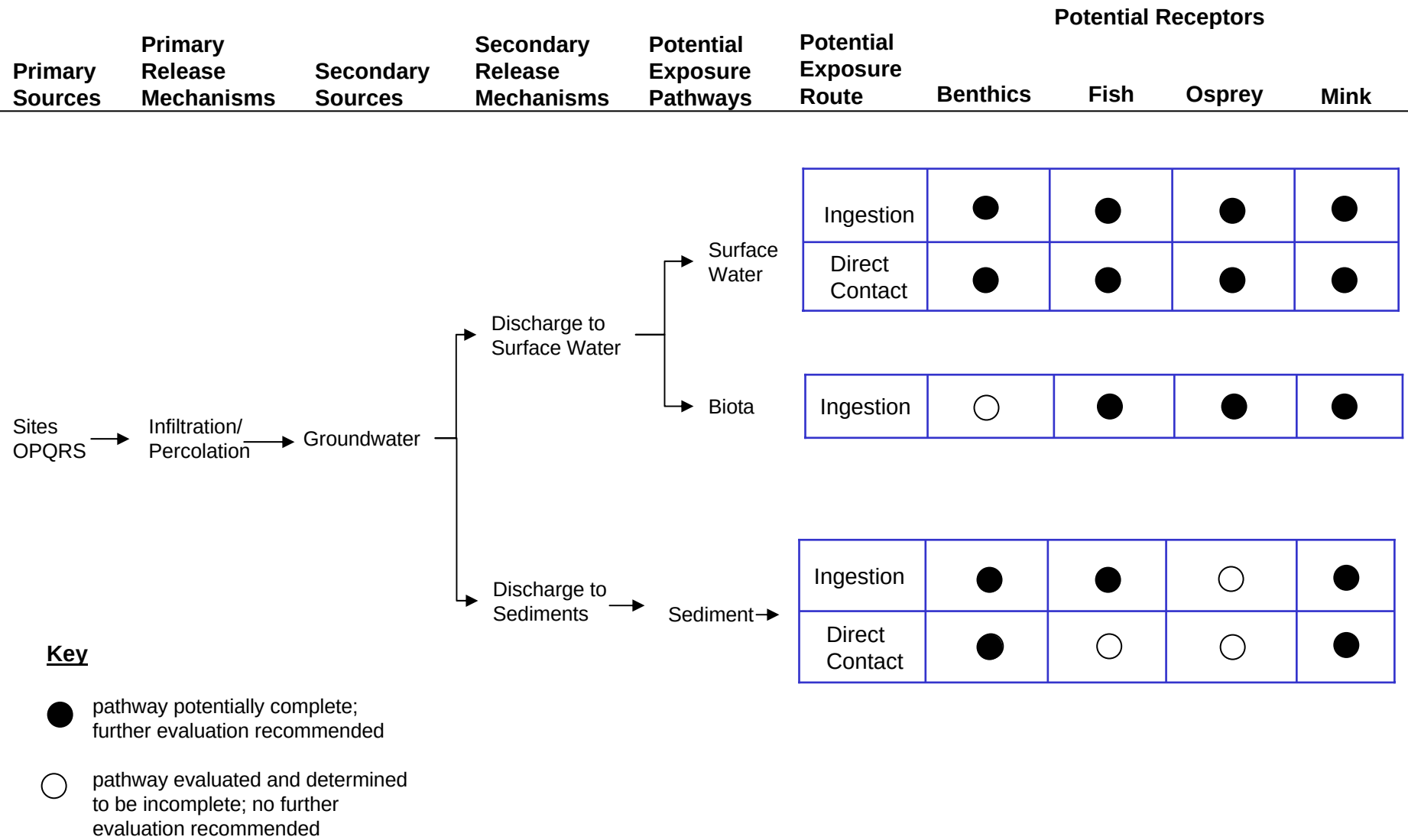


Figure 2-13
Conceptual Site Model for the Ponded Area
Sauget Area 2 RI/FS SSP
Sauget Area 2 Sites Group

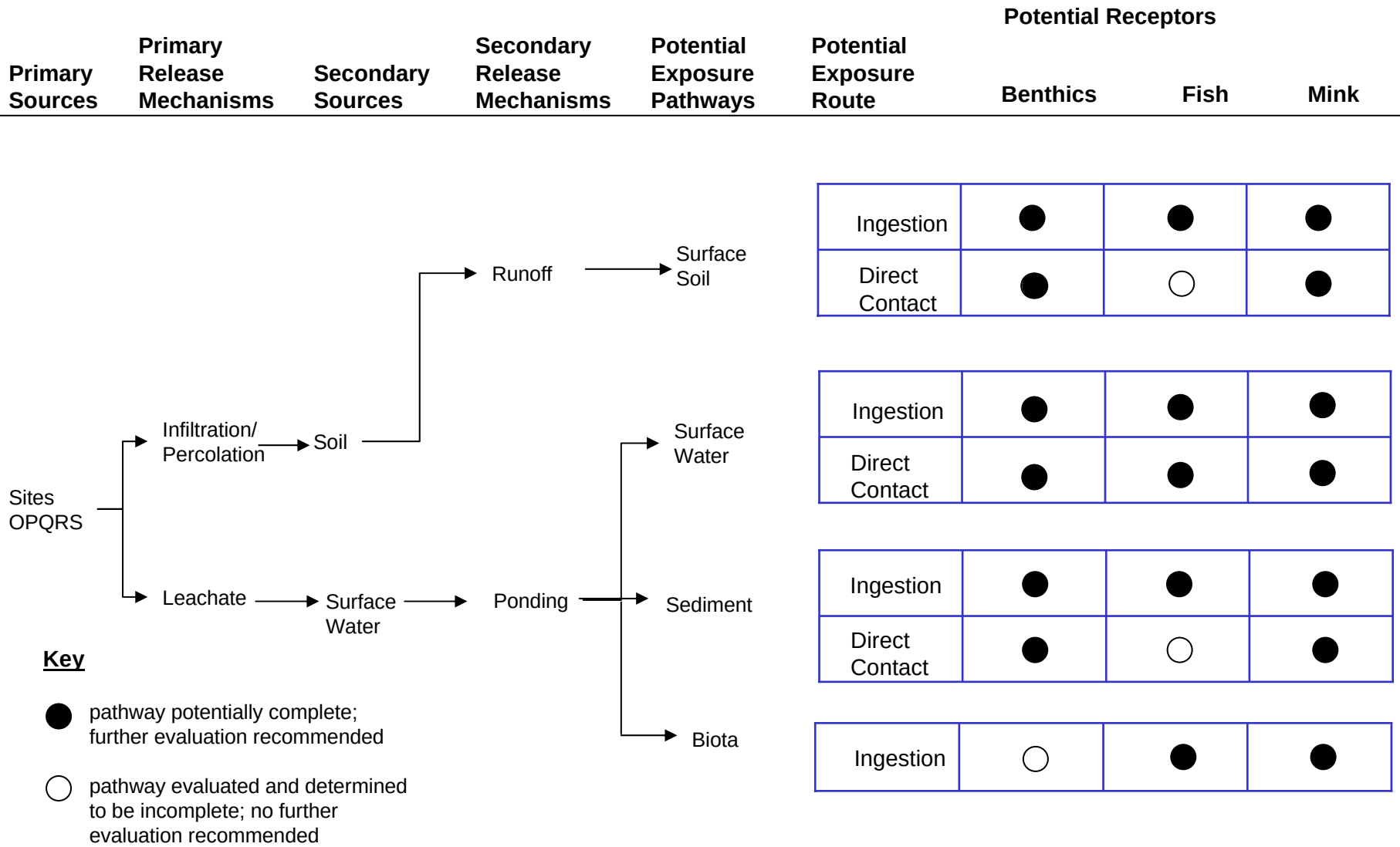
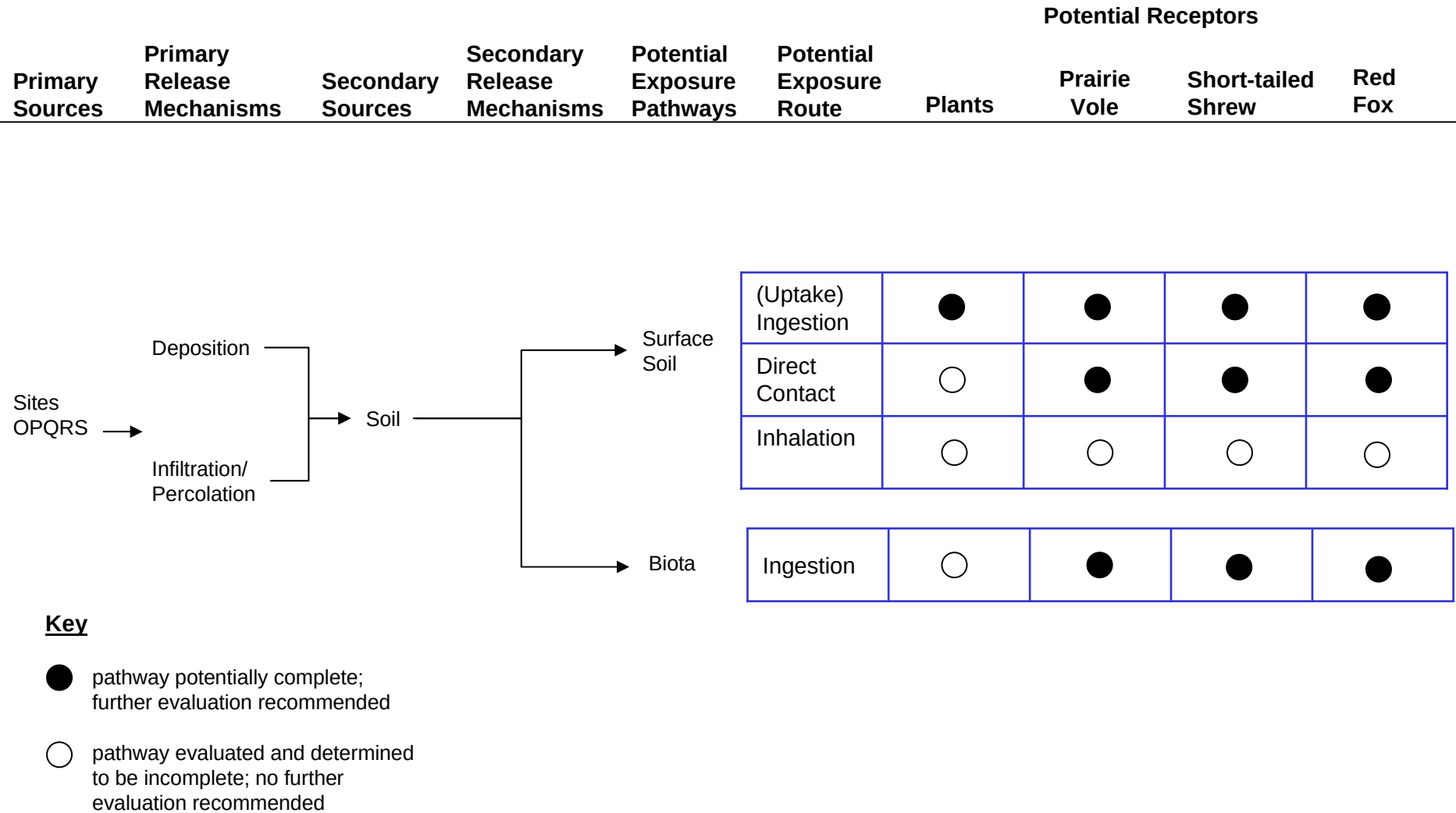
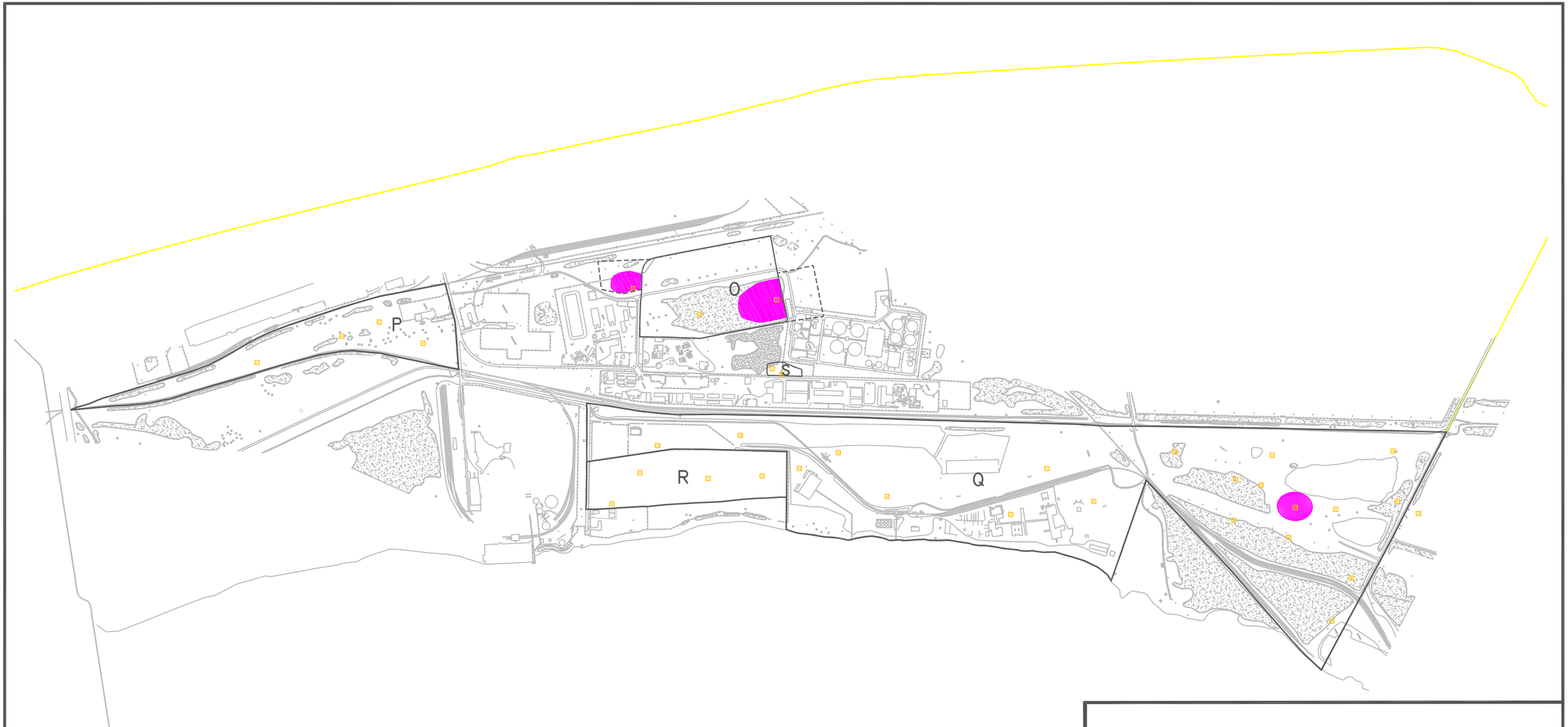


Figure 2-14
Conceptual Site Model for the Flood Plain Assessment
Sauget Area 2 RI/FS SSP
Sauget Area 2 Sites Group





LEGEND

- Waste Characterization Boring Location
- Areas of Potential Ecological Concern

0 1000

SCALE FEET

SAUGET AREA 2
SAUGET ILLINOIS

Figure 9 – 1

Areas of Potential Ecological Concern
Sauget Area 2 Sites

Date:	Project Number:	Scale:
January 2008	1–7305–0000	AS SHOWN
Source: URS	**Checked by:**	**Sheet Number:**

amec EARTH & ENVIRONMENTAL, INC.
285 Davidson Avenue, Suite 405
Somerset, NJ 08873

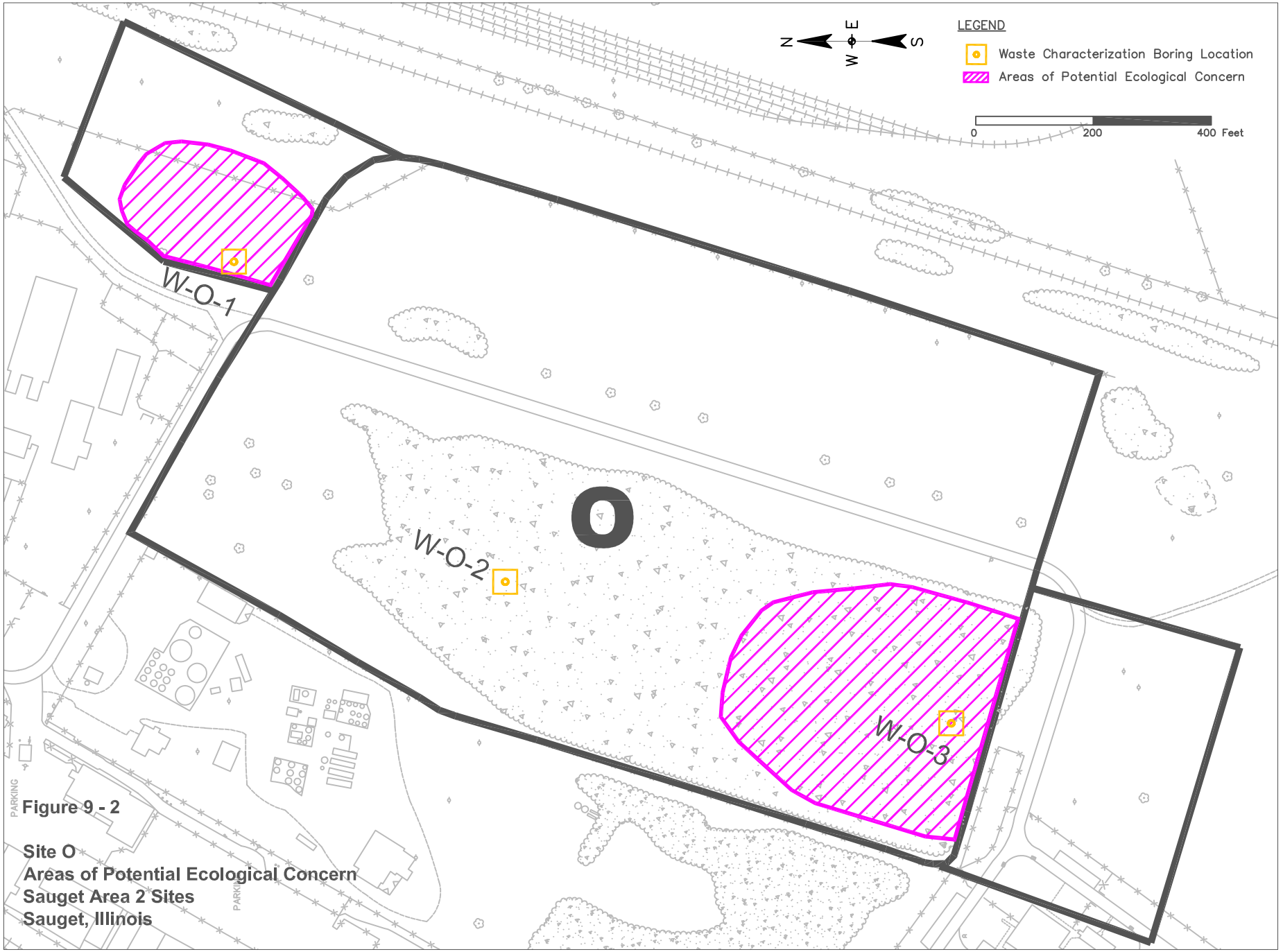


Figure 9 - 2

Site O
Areas of Potential Ecological Concern
Sauget Area 2 Sites
Sauget, Illinois

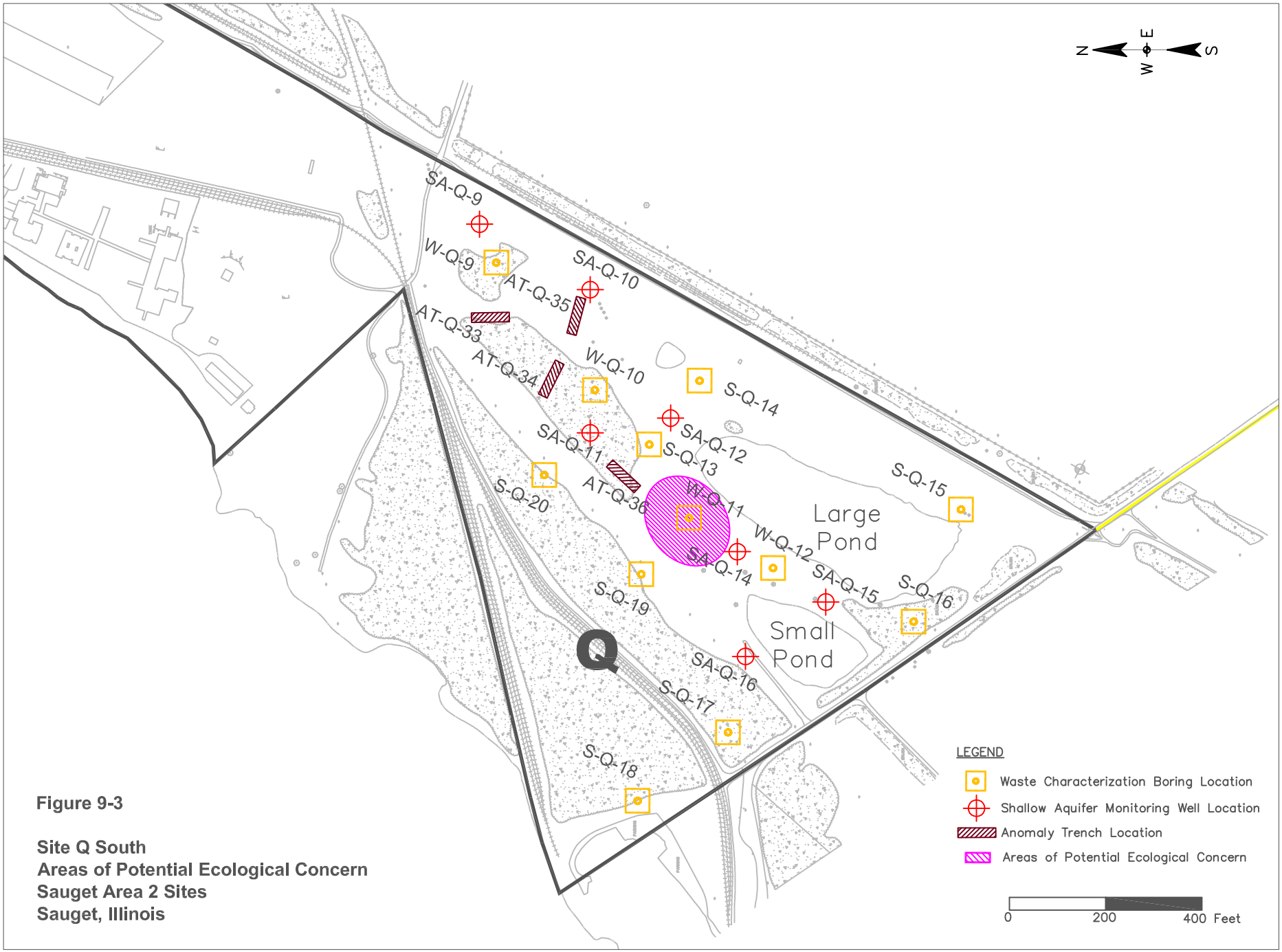


Figure 9-3

Site Q South
Areas of Potential Ecological Concern
Sauget Area 2 Sites
Sauget, Illinois

APPENDICES

Appendix III-A

Summary of Concentrations by Medium Used in Floodplain Assessment

Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	OFF-SITE (Background)				SITE O									
		SOIL-OS-2 08/14/02 0.5 Ft 16.5	SOIL-OS-2 DUP 08/14/02 0.5 Ft 14.1	SOIL-OS-3 08/14/02 0.5 Ft 13.1	SOIL-OS-4 08/15/02 0.5 Ft 12.8	SOIL-O-1 07/10/02 0.5 Ft 6.7	SOIL-O-2 07/10/02 0.5 Ft 12.3	SOIL-O-3 07/10/02 0.5 Ft 13.1	SA-O-1-SS 05/26/05 0.5 Ft NR	SA-O-1-SS-D 05/26/05 0.5 Ft NR	SA-O-2-SS 05/26/05 0.5 Ft NR	SA-O-3-SS 05/26/05 0.5 Ft NR	SA-O-4-SS 05/26/05 0.5 Ft NR	SOIL-O-4-SS 05/26/05 0.5 Ft NR	SOIL-O-4-SS-D 05/26/05 0.5 Ft NR
VOCs	**Units**														
1,1,1-Trichloroethane	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	8.6 J	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
1,1,2,2-Tetrachloroethane	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
1,1,2-Trichloroethane	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
1,1-Dichloroethane	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
1,1-Dichloroethylene	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
1,2-Dichloroethane	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
1,2-Dichloroethene (total)	ug/kg	12 U	15 U	11 U	18 U	850 UJ	20 U	11 U	8.3 U	9.7 UJ	7.4 U	7.6 U	7.8 U	13 U	13 U
1,2-Dichloropropane	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
2-Butanone (MEK)	ug/kg	29 U	37 U	28 U	45 U	2100 UJ	49 U	17 J	8.3 J	6.9 J	19 U	19 U	19 U	14 J	14 J
2-Hexanone	ug/kg	29 U	37 U	28 U	45 U	2100 UJ	49 U	28 U	21 U	24 UJ	19 U	19 U	19 U	32 U	33 U
4-Methyl-2-pentanone (MIBK)	ug/kg	29 U	37 U	28 U	45 U	2100 UJ	49 U	28 U	21 U	24 UJ	19 U	19 U	19 U	32 U	33 U
Acetone	ug/kg	58 U	75 U	55 U	91 U	4200 R	98 U	130	63	58 J	33 J	8.3 J	31 J	65	62 J
Benzene	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	590 J	9.8 U	5.6 U	6.6	11 J	2.1 J	3.8 U	1.1 J	6.5 U	6.7 U
Bromodichloromethane	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Bromoform	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Bromomethane	ug/kg	12 UJ	15 UJ	11 UJ	18 UJ	850 UJ	20 U	11 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Carbon Disulfide	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	180 J	9.8 U	5.6 U	4.2 U	2.6 J	2.3 J	3.8 U	1.7 J	6.5 U	6.7 U
Carbon Tetrachloride	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Chlorobenzene	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	5800 J	9.8 U	5.6 U	18	30 J	3.7 U	3.8 U	3.9 U	4.7 J	3.2 J
Chloroethane	ug/kg	12 U	15 U	11 U	18 U	850 UJ	20 U	11 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Chloroform	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Chloromethane	ug/kg	12 UJ	15 UJ	0.45 J	18 UJ	850 UJ	20 U	11 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
cis-1,3-Dichloropropene	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Dibromochloromethane	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Ethylbenzene	ug/kg	5.8 U	0.45 J	0.57 J	9.1 U	4400 J	0.38 J	5.6 U	3.4 J	4.6 J	1.3 J	3.8 U	1.5 J	6.5 U	6.7 U
Methylene Chloride	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Styrene (Monomer)	ug/kg	5.8 U	0.76 J	1.3 J	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Tetrachloroethene	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	290 J	1 J	5.6 U	3.5 J	4.3 J	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Toluene	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	870 J	9.8 U	5.6 U	3.7 J	3.6 J	2.9 J	3.8 U	2.2 J	5.1 J	4.7 J
trans-1,3-Dichloropropene	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	9.8 U	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Trichloroethylene	ug/kg	5.8 U	7.5 U	5.5 U	9.1 U	420 UJ	0.58 J	5.6 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Vinyl chloride	ug/kg	12 U	15 U	11 U	18 U	850 UJ	20 U	11 U	4.2 U	4.9 UJ	3.7 U	3.8 U	3.9 U	6.5 U	6.7 U
Xylenes, Total	ug/kg	12 U	1.1 J	0.54 J	18 U	80000 J	1.3 J	11 U	22	24 J	3.2 J	7.6 U	7.1 J	13 U	13 U
SVOCs															
1,2,4-Trichlorobenzene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	180 J	120 J	400 UJ	30 J	390 UJ	400 U	400 U
1,2-Dichlorobenzene	ug/kg	400 U	380 U	370 U	380 U	34 J	380 U	36 J	290 J	760 J	400 UJ	390 UJ	49 J	41 J	400 U
1,3-Dichlorobenzene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
1,4-Dichlorobenzene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	120 J	370 J	400 UJ	390 UJ	46 J	400 U	400 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
2,4,5-Trichlorophenol	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
2,4,6-Trichlorophenol	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	160 J	440 J	400 UJ	390 UJ	390 UJ	400 U	400 U
2,4-Dichlorophenol	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	35 J	180 J	440 J	400 UJ	390 UJ	390 UJ	400 U	400 U
2,4-Dimethylphenol	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
2,4-Dinitrophenol	ug/kg	2100 U	1900 U	1900 U	2000 U	1800 UJ	1900 U	2000 UJ	2200 UJ	2100 UJ	2100 UJ	2000 UJ	2000 UJ	2100 U	2000 U
2,4-Dinitrotoluene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
2,6-Dinitrotoluene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
2-Chloronaphthalene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
2-Chlorophenol	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
2-Methylnaphthalene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	48 J	51 J	400 UJ	390 UJ	38 J	400 U	400 U
2-Methylphenol (o-Cresol)	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
2-Nitroaniline	ug/kg	2100 U	1900 U	1900 U	2000 U	1800 U	1900 U	53 J	210 J	450 J	2100 UJ	2000 UJ	2000 UJ	2100 U	2000 U
2-Nitrophenol	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
3,3'-Dichlorobenzidine	ug/kg	800 U	750 U	740 U	770 U	700 U	750 U	780 U	860 UJ	810 UJ	800 UJ	790 UJ	780 UJ	800 U	790 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
3-Nitroaniline	ug/kg	2100 U	1900 U	1900 U	2000 U	1800 U	1900 U	2000 U	2200 UJ	2100 UJ	2100 UJ	2000 UJ	2000 UJ	2100 U	2000 U
4,6-Dinitro-2-methylphenol	ug/kg	2100 U	1900 U	1900 U	2000 U	1800 U	1900 U	2000 U	2200 UJ	2100 UJ	2100 UJ	2000 UJ	2000 UJ	2100 U	2000 U
4-Bromophenyl Phenyl Ether	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
4-Chloro-3-methylphenol	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
4-Chloroaniline	ug/kg	800 U	750 U	740 U	770 U	700 U	750 U	780 U	77 J	810 UJ	800 UJ	790 UJ	780 UJ	800 U	790 U
4-Chlorophenyl Phenyl Ether	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
4-Nitroaniline	ug/kg	2100 U	1900 U	1900 U	2000 U	1800 U	1900 U	2000 U	960 J	1200 J	2100 UJ	2000 UJ	2000 UJ	2100 U	2000 U
4-Nitrophenol	ug/kg	2100 U	1900 U	1900 U	2000 U	1800 U	1900 U	2000 U	2200 UJ	2100 UJ	2100 UJ	2000 UJ	2000 UJ	2100 U	2000 U
Acenaphthene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Acenaphthylene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Anthracene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U

NOTES:
U = Not detected at the MDL.
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UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.
NR = Not analyzed
D = Compound concentrations reported from a secondary dilution analysis.

Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	OFF-SITE (Background)				SITE O									
		SOIL-OS-2 08/14/02 0.5 Ft 16.5	SOIL-OS-2 DUP 08/14/02 0.5 Ft 14.1	SOIL-OS-3 08/14/02 0.5 Ft 13.1	SOIL-OS-4 08/15/02 0.5 Ft 12.8	SOIL-O-1 07/10/02 0.5 Ft 6.7	SOIL-O-2 07/10/02 0.5 Ft 12.3	SOIL-O-3 07/10/02 0.5 Ft 13.1	SA-O-1-SS 05/26/05 0.5 Ft NR	SA-O-1-SS-D 05/26/05 0.5 Ft NR	SA-O-2-SS 05/26/05 0.5 Ft NR	SA-O-3-SS 05/26/05 0.5 Ft NR	SA-O-4-SS 05/26/05 0.5 Ft NR	SOIL-O-4-SS 05/26/05 0.5 Ft NR	SOIL-O-4-SS-D 05/26/05 0.5 Ft NR
SVOCs	**Units**														
Benzo(a)anthracene	ug/kg	28 J	22 J	40 J	380 U	41 J	380 U	63 J	170 J	400 UJ	400 UJ	390 UJ	37 J	400 U	400 U
Benzo(a)pyrene	ug/kg	400 U	380 U	370 U	380 U	46 J	380 U	390 U	180 J	200 J	400 UJ	390 UJ	37 J	400 U	400 U
Benzo(b)fluoranthene	ug/kg	40 J	380 U	370 U	380 U	89 J	140 J	98 J	260 J	360 J	400 UJ	390 UJ	40 J	400 U	400 U
Benzo(g,h,i)perylene	ug/kg	400 U	380 U	370 U	380 U	42 J	380 U	1200	620 J	880 J	400 UJ	390 UJ	390 UJ	400 U	400 U
Benzo(k)fluoranthene	ug/kg	25 J	36 U	60 J	380 U	350 U	380 U	100 J	260 J	340 J	400 UJ	390 UJ	390 UJ	400 U	400 U
bis(2-Chloroethoxy)methane	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
bis(2-Chloroethyl)ether	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
bis(2-Ethylhexyl)phthalate	ug/kg	400 U	300 J	370 U	380 U	250 J	23 J	62 J	140 J	400 UJ	710 J	390 UJ	630 J	400 U	400 U
Butyl Benzyl Phthalate	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	35 J	9800 J	39000 J	460 J	280 J	350 J	400 U	400 U
Carbazole	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Chrysene	ug/kg	37 J	33 J	47 J	380 U	67 J	380 U	200 J	460 J	560 J	400 UJ	65 J	59 J	400 U	400 U
Dibenzo(a,h)anthracene	ug/kg	400 U	380 U	370 U	380 U	350 U	78 J	130 J	160 J	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Dibenzofuran	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Diethyl Phthalate	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Dimethyl Phthalate	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Di-n-butylphthalate	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	49 J	430 UJ	400 UJ	37 J	390 UJ	390 UJ	400 U	400 U
Di-n-octylphthalate	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Fluoranthene	ug/kg	56 J	380 U	47 J	380 U	82 J	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	39 J	36 J	37 J
Fluorene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Hexachlorobenzene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	110 J	450 J	300 J	400 UJ	390 UJ	390 UJ	400 U	400 U
Hexachlorobutadiene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Hexachlorocyclopentadiene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Hexachloroethane	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Indeno(1,2,3-cd)pyrene	ug/kg	400 U	380 U	370 U	380 U	32 J	380 U	390 U	170 J	230 J	400 UJ	390 UJ	390 UJ	400 U	400 U
Isophorone	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Naphthalene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	36 J	400 UJ	390 UJ	390 UJ	400 U	400 U
Nitrobenzene	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
N-Nitroso-di-n-propylamine	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
N-Nitrosodiphenylamine	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Pentachlorophenol	ug/kg	5.1 J	2.8 J	1.7 J	20 U	61 J	23 J	2000	19000 J	12000 J	35	150 J	9300 J	39 J	28 J
Phenanthrene	ug/kg	34 J	31 J	51 J	380 U	32 J	380 U	40 J	150 J	180 J	400 UJ	44 J	68 J	400 U	400 U
Phenol	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
Pyrene	ug/kg	57 J	380 U	56 J	380 U	78 J	380 U	130 J	490 J	550 J	400 UJ	77 J	75 J	33 J	37 J
Pesticides															
4,4'-DDD	ug/kg	6.6 J	2.4 J	3.7 UJ	3.8 UJ	3.5 U	3.8 U	86 J	NR	NR	NR	NR	NR	NR	NR
4,4'-DDE	ug/kg	16 J	8.4 J	4.1 J	3.8 U	3.5 U	3.8 U	39 U	NR	NR	NR	NR	NR	NR	NR
4,4'-DDT	ug/kg	46 J	25 J	16 J	3.8 UJ	3.5 UJ	0.81 J	230 J	NR	NR	NR	NR	NR	NR	NR
Aldrin	ug/kg	2.1 U	1.9 U	1.9 UJ	2 U	1.8 U	1.9 U	20 U	NR	NR	NR	NR	NR	NR	NR
alpha-BHC	ug/kg	2.1 U	1.9 U	1.9 UJ	2 U	1.8 U	1.9 U	20 U	NR	NR	NR	NR	NR	NR	NR
alpha-Chlordane	ug/kg	2.1 U	1.9 U	1.9 UJ	2 U	1.8 U	1.9 U	9.4 J	NR	NR	NR	NR	NR	NR	NR
beta-BHC	ug/kg	2.1 U	1.9 U	1.9 UJ	2 U	1.8 U	1.9 U	20 U	NR	NR	NR	NR	NR	NR	NR
delta-BHC	ug/kg	2.1 U	1.9 U	1.9 UJ	2 U	1.8 U	1.9 U	20 U	NR	NR	NR	NR	NR	NR	NR
Dieldrin	ug/kg	9.6 J	3.8 J	3 J	3.8 U	1.4 J	3.8 U	180 J	NR	NR	NR	NR	NR	NR	NR
Endosulfan I	ug/kg	2.1 U	0.19 J	2.1 J	2 U	1.8 U	1.9 U	20 U	NR	NR	NR	NR	NR	NR	NR
Endosulfan II	ug/kg	4 U	3.8 U	0.58 J	3.8 U	3.5 U	3.8 U	11 J	NR	NR	NR	NR	NR	NR	NR
Endosulfan Sulfate	ug/kg	1.1 J	3.8 U	0.71 J	3.8 U	3.5 U	3.8 U	170 J	NR	NR	NR	NR	NR	NR	NR
Endrin	ug/kg	4 U	3.8 U	3.7 UJ	3.8 U	3.5 UJ	3.8 U	39 UJ	NR	NR	NR	NR	NR	NR	NR
Endrin Aldehyde	ug/kg	4 UJ	3.8 UJ	3 J	3.8 UJ	3.5 U	3.4 J	39 U	NR	NR	NR	NR	NR	NR	NR
Endrin Ketone	ug/kg	4 U	3.8 U	3.7 UJ	3.8 U	3.5 UJ	3.8 U	22 J	NR	NR	NR	NR	NR	NR	NR
gamma-BHC (Lindane)	ug/kg	2.1 U	1.9 U	1.9 UJ	2 U	1.8 U	1.9 U	32 J	NR	NR	NR	NR	NR	NR	NR
gamma-Chlordane	ug/kg	2.1 U	1.9 U	1.9 UJ	2 U	0.33 J	1.9 U	180	NR	NR	NR	NR	NR	NR	NR
Heptachlor	ug/kg	2.1 U	1.9 U	1.9 UJ	2 U	1.8 U	1.9 U	16 J	NR	NR	NR	NR	NR	NR	NR
Heptachlor Epoxide	ug/kg	2.3 J	0.77 J	1.2 J	2 U	1.8 U	1.9 U	20 U	NR	NR	NR	NR	NR	NR	NR
Methoxychlor	ug/kg	21 UJ	2.8 J	19 UJ	20 UJ	18 UJ	0.88 J	200 UJ	NR	NR	NR	NR	NR	NR	NR
Toxaphene	ug/kg	210 U	190 U	190 UJ	200 U	180 U	190 U	2000 U	NR	NR	NR	NR	NR	NR	NR
Herbicides															
2,4-D	ug/kg	10 U	9.4 U	5.8 J	9.6 U	35 U	31 J	50 J	2700 U	2500 U	10 U	10	9.7 U	40 U	40 U
2,4-DB	ug/kg	10 U	9.4 U	9.3 U	9.6 U	35 U	13 J	19 J	2700 U	2500 U	10 U	9.9 U	9.7 U	40 U	40 U
2,4,5-T	ug/kg	10 U	9.4 U	9.3 U	9.6 U	35 U	9.4 U	17 J	2700 U	2500 U	10 U	6.7 J	15 J	40 U	40 U
2,4,5-TP (Silvex)	ug/kg	10 U	9.4 U	9.3 U	9.6 U	35 U	9.4 U	9.8 U	2700 U	2500 U	10 U	9.9 U	9.7 U	40 U	40 U
Dalapon	ug/kg	2400 U	2300 U	2200 U	2300 U	8500 U	2300 U	2400 U	110000 U	100000 U	400 U	390 U	380 U	1600 U	1600 U
Dicamba	ug/kg	24 U	23 U	22 U	23 U	85 U	2.4 J	24 U	2700 U	2500 U	10 U	9.9 U	9.7 U	40 U	40 U
Dichlorprop	ug/kg	59 J	160 J	110 U	120 U	11 J	37 J	10 J	33000 U	31000 U	120 U	120 U	120 U	490 U	480 U
Dinoseb	ug/kg	400 U	380 U	370 U	380 U	350 U	380 U	390 U	430 UJ	400 UJ	400 UJ	390 UJ	390 UJ	400 U	400 U
MCPA	ug/kg	2400 U	2300 U	2200 U	2300 U	8500 U	2300 U	2400 U	650000 U	610000 U	2400 U	2400 U	2300 U	9700 U	9600 U
MCPP	ug/kg	6600 J	2200 J	2200 U	2300 U	43000 J	12000 J	11000 J	650000 U	610000 U	3100	2400 U	10000	9700 U	9600 U

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NR = Not analyzed
D = Compound concentrations reported from a secondary dilution analysis.

Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	Sample ID	OFF-SITE (Background)				SITE O									
	Sample Date	SOIL-OS-2	SOIL-OS-2 DUP	SOIL-OS-3	SOIL-OS-4	SOIL-O-1	SOIL-O-2	SOIL-O-3	SA-O-1-SS	SA-O-1-SS-D	SA-O-2-SS	SA-O-3-SS	SA-O-4-SS	SOIL-O-4-SS	SOIL-O-4-SS-D
		08/14/02	08/14/02	08/14/02	08/15/02	07/10/02	07/10/02	07/10/02	05/26/05	05/26/05	05/26/05	05/26/05	05/26/05	05/26/05	05/26/05
	Sample Depth	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft
	Percent Moisture	16.5	14.1	13.1	12.8	6.7	12.3	13.1	NR	NR	NR	NR	NR	NR	NR
PCBs	**Units**														
Decachlorobiphenyl	ug/kg	100	73	70	20 U	9000 U	19 U	100 U	NR	NR	NR	NR	NR	NR	NR
Dichlorobiphenyl	ug/kg	4 U	3.8 U	3.7 U	3.8 U	81000	3.8 U	100	NR	NR	NR	NR	NR	NR	NR
Heptachlorobiphenyl	ug/kg	6.2 J	2.6 J	8.3 J	12 U	13000	11 U	490	NR	NR	NR	NR	NR	NR	NR
Hexachlorobiphenyl	ug/kg	12	8.7	11	7.8 U	32000	7.6 U	950	NR	NR	NR	NR	NR	NR	NR
Monochlorobiphenyl	ug/kg	4 U	3.8 U	3.7 U	3.8 U	74000	0.78 J	14 J	NR	NR	NR	NR	NR	NR	NR
Nonachlorobiphenyl	ug/kg	39	29	29	20 U	9000 U	19 U	100 U	NR	NR	NR	NR	NR	NR	NR
Octachlorobiphenyl	ug/kg	4.2 J	1.6 J	5.6 J	12 U	2200 J	11 U	110	NR	NR	NR	NR	NR	NR	NR
Pentachlorobiphenyl	ug/kg	12	6.6 J	6.5 J	7.8 U	110000	7.6 U	2700	NR	NR	NR	NR	NR	NR	NR
Tetrachlorobiphenyl	ug/kg	8.2 U	7.6 U	7.5 U	7.8 U	300000	7.6 U	5200	NR	NR	NR	NR	NR	NR	NR
Trichlorobiphenyl	ug/kg	4 U	3.8 U	3.7 U	3.8 U	97000	3.8 U	1200	NR	NR	NR	NR	NR	NR	NR
Total PCBs	ug/kg	173	122	130	20 U	709200	0.78	10764	NR	NR	NR	NR	NR	NR	NR
Dioxins/Furans															
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.3 UJ	3 J	0.09 UJ	0.092 U	2700 J	1.8	270 J	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,6,7,8-HpCDF	ug/kg	0.079 U	0.53 U	0.11 U	0.13 U	390 J	0.21 J	52	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8,9-HpCDF	ug/kg	0.028 U	0.054 U	0.13 U	0.14 U	28	0.021 U	4.3	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	0.034 U	0.056 U	0.11 U	0.098 U	4.9	0.055 U	0.28 U	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8-HxCDF	ug/kg	0.015 U	0.072 U	0.13 U	0.053 U	23	0.039 U	3.5	NR	NR	NR	NR	NR	NR	NR
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	0.04 U	0.59 U	0.12 U	0.1 U	56	0.063 U	10	NR	NR	NR	NR	NR	NR	NR
1,2,3,6,7,8-HxCDF	ug/kg	0.014 U	0.052 U	0.11 U	0.055 U	2.8	0.038 U	0.33 J	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	ug/kg	0.033 U	0.94 U	0.1 U	0.092 U	8.5	0.052 U	1.1	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8,9-HxCDF	ug/kg	0.023 U	0.022 U	0.11 U	0.076 U	3.3	0.0073 U	0.52 J	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8-Pentachlorodibenzofuran	ug/kg	0.017 U	0.027 U	0.029 U	0.083 U	2.9 J	0.004 U	0.38 U	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	ug/kg	0.034 U	0.033 U	0.061 U	0.27 U	1.9 J	0.03 U	0.1 U	NR	NR	NR	NR	NR	NR	NR
2,3,4,6,7,8-HxCDF	ug/kg	0.014 U	0.045 U	0.083 U	0.081 U	6.5	0.04 U	0.88	NR	NR	NR	NR	NR	NR	NR
2,3,4,7,8-PeCDF	ug/kg	0.018 U	0.029 U	0.03 U	0.082 U	6.7	0.0062 U	0.65	NR	NR	NR	NR	NR	NR	NR
2,3,7,8-TCDD	ug/kg	0.023 U	0.022 U	0.026 U	0.074 U	1.9 J	0.0032 U	0.16 J	NR	NR	NR	NR	NR	NR	NR
2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.025 U	0.099 U	0.034 U	0.083 U	8	0.0074 U	0.69	NR	NR	NR	NR	NR	NR	NR
OCDD	ug/kg	2.8 J	33 J	1.1 UJ	0.89 UJ	8900 J	44	4400 J	NR	NR	NR	NR	NR	NR	NR
OCDF	ug/kg	0.28 UJ	2.4 J	0.42 UJ	0.15 U	1400 J	1.4	430 J	NR	NR	NR	NR	NR	NR	NR
Total HpCDD	ug/kg	0.3 UJ	5.7 J	0.09 UJ	0.41 U	4600	3.6	470	NR	NR	NR	NR	NR	NR	NR
Total HpCDF	ug/kg	0.14 UJ	1.3 J	0.13 UJ	0.14 U	2400	1.2	320	NR	NR	NR	NR	NR	NR	NR
Total HxCDD	ug/kg	0.053 U	0.94 U	0.12 U	0.094 U	200	0.084 U	33	NR	NR	NR	NR	NR	NR	NR
Total HxCDF	ug/kg	0.03 U	0.19 U	0.13 U	0.083 U	260	1.2 U	65	NR	NR	NR	NR	NR	NR	NR
Total PeCDD	ug/kg	0.24 U	0.24 U	0.25 U	0.27 U	49	0.16 U	6.6	NR	NR	NR	NR	NR	NR	NR
Total PeCDF	ug/kg	0.026 U	0.12 U	0.03 U	0.1 U	41	0.011 U	5.5	NR	NR	NR	NR	NR	NR	NR
Total TCDD	ug/kg	0.023 U	0.099 U	0.026 U	0.13 U	24	0.0097 U	2.3	NR	NR	NR	NR	NR	NR	NR
Total TCDF	ug/kg	0.025 U	0.099 U	0.034 U	0.083 U	79	0.0074 U	9.8	NR	NR	NR	NR	NR	NR	NR
Metals															
Aluminum	mg/kg	7200	8200	6200	5100	5200 J	7400 J	8600 J	5500	4300	8800	8400	9200	11000	11000
Antimony	mg/kg	1.9 J	1.5 J	0.93 J	2.1 UJ	0.81 J	0.74 J	2.1 UJ	0.56 J	0.9 J	2.2 U	2.3 UJ	0.6 J	1.2 J	0.92 J
Arsenic	mg/kg	8.8	9.3	6.2	5.4	11	5.1	6.3	11	11	4.9	4.5	6.2	8.3	8.2
Barium	mg/kg	190	200	170	170	340 J	100 J	130 J	340	540	83	82	120	210	210
Beryllium	mg/kg	0.57	0.6	0.41 J	0.4 J	0.39 J	0.46	0.54	0.36 J	0.33 J	0.49	0.45 J	0.5	0.75	0.74
Cadmium	mg/kg	4.5	2.1	1.1 J	0.34 J	17 J	0.54 J	1.7 J	14	13	0.55 U	0.56 U	0.78	5.6	5.6
Calcium	mg/kg	3400	3100	3100	11000	4900	26000	6600	7200	6300	26000	15000	25000	4700	4700
Chromium	mg/kg	13	13	11	9.3	16	13	15	15	15	15	13	15	17	16
Cobalt	mg/kg	6.6	6.4	3.3	5.3	5.9 J	6.6 J	6.9 J	4.7	3.6	6.6	6	7.2	7.4	7.4
Copper	mg/kg	150 J	43 J	30	12	270	26	40	250	330	14	15	32	160	150
Iron	mg/kg	14000	15000	12000	11000	11000	15000	16000	10000	8900	15000	13000	15000	17000	17000
Lead	mg/kg	130 J	77 J	78 J	31 J	130 J	14 J	20 J	130	170	8.4	8	21	110	100
Magnesium	mg/kg	2400	2800	1700	5500	2300 J	8500 J	4100 J	3100	3000	7100	8900	6800	3300	3300
Manganese	mg/kg	410	380	86	260	420	530	490	110	100	480	430	560	400	400
Mercury	mg/kg	0.11	0.08	0.093	0.057	43	0.049	2.9	180 J	180 J	0.033 J	0.038	0.038 J	0.15	0.19
Nickel	mg/kg	27	18	12	14	28	18	18	23	19	17	16	18	23	22
Potassium	mg/kg	2300 J	2300 J	1900	1300 J	720 J	850 J	860 J	1000	850	890	840	1300	2300	2300
Selenium	mg/kg	0.62 J	1 U	1.1 U	1.1 U	3.1 U	1.1 U	1.1 U	2.3 J	10	2.7 U	2.8 U	2.7 U	2.8 U	2.9 U
Silver	mg/kg	0.67 J	1 U	1.1 U	1.1 U	2.9	1.1 U	1.1 U	3.5	4.2	1.1 U	1.1 U	1.1 U	0.6 J	0.64 J
Sodium	mg/kg	87 U	82 U	75 U	93 U	96 J	110 J	85 J	180	180	180	220	150	170	170
Thallium	mg/kg	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.9 U	2.8 U	2.7 U	2.8 U	2.7 U	2.8 U	2.9 U
Vanadium	mg/kg	22 J	25 J	21 J	18 J	19 J	28 J	28 J	17	15	28	29	27	29	29
Zinc	mg/kg	440	260	210	55	940 J	70 J	130 J	1000	810	39	39	120	500	480

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.
NR = Not analyzed
D = Compound concentrations reported from a secondary dilution analysis.

Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	SITE O		SITE P											
	SOIL-O-5-SS 05/26/05 0.5 Ft NR	SOIL-O-6-SS 05/26/05 0.5 Ft NR	SOIL-P-1 07/16/02 0.5 Ft 3.7	SOIL-P-2 07/16/02 0.5 Ft 10	SOIL-P-3 07/17/02 0.5 Ft 3.3	SOIL-P-4 07/16/02 0.5 Ft 8.9	SA-P-1-SS 05/26/05 0.5 Ft NR	SA-P-1-SS-D 05/26/05 0.5 Ft NR	SA-P-2-SS 05/26/05 0.5 Ft NR	AT-P-2-SS 05/26/05 0.5 Ft NR	AT-P-2-SS-D 05/26/05 0.5 Ft NR	AT-P-3-SS 05/26/05 0.5 Ft NR	AT-P-4-SS 05/26/05 0.5 Ft NR	AT-P-5-SS 05/26/05 0.5 Ft NR
VOCs														
1,1,1-Trichloroethane	510 U	6.2 U	9.1 U	7.1 U	14 U	9.5 U	0.89 J	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
1,1,2,2-Tetrachloroethane	510 U	6.2 U	9.1 UJ	7.1 U	14 U	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
1,1,2-Trichloroethane	510 U	6.2 U	9.1 UJ	7.1 U	14 UJ	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
1,1-Dichloroethane	510 U	6.2 U	9.1 U	7.1 U	14 U	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
1,1-Dichloroethylene	510 U	6.2 U	9.1 U	7.1 U	14 U	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
1,2-Dichloroethane	510 U	6.2 U	9.1 U	7.1 U	14 U	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
1,2-Dichloroethene (total)	1000 U	12 U	18 UJ	14 U	28 UJ	19 U	7.1 U	9.3 U	NR	11 U	11 U	21 U	12 U	8.2 U
1,2-Dichloropropane	510 U	6.2 U	9.1 UJ	7.1 U	14 UJ	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
2-Butanone (MEK)	2600 U	12 J	7.1 J	36 U	70 U	47 U	5.1 J	4.5 J	NR	10 J	10 J	52 U	12 J	8.6 J
2-Hexanone	2600 U	31 U	5.9 J	36 U	70 U	47 U	18 U	23 U	NR	27 U	28 U	52 U	29 U	21 U
4-Methyl-2-pentanone (MIBK)	2600 U	31 U	21 J	36 U	17 J	47 U	18 U	23 U	NR	27 U	28 U	52 U	39	21 U
Acetone	1200 J	22 J	91 U	71 U	140 U	95 U	20 J	12 J	NR	18 J	22 J	81 J	18 J	85
Benzene	1100	2.1 J	3.8 J	7.1 U	9.4 J	9.5 U	0.92 J	1.6 J	NR	5.5 U	5.5 U	10 U	1.4 J	7.8
Bromodichloromethane	510 U	6.2 U	9.1 UJ	7.1 U	14 UJ	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Bromoform	510 U	6.2 U	9.1 UJ	7.1 U	14 UJ	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Bromomethane	510 U	6.2 U	18 U	14 U	28 U	19 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Carbon Disulfide	510 U	6.8	1.4 J	7.1 U	1.4 J	9.5 UJ	2.2 J	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Carbon Tetrachloride	510 U	6.2 U	9.1 U	7.1 U	14 U	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Chlorobenzene	14000	6.2 U	4 J	7.1 U	14 UJ	9.5 U	3.6 U	4.6 U	540 J	5.5 U	5.5 U	10 UJ	5.6 J	3 J
Chloroethane	510 U	6.2 U	18 U	14 U	28 U	19 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Chloroform	510 U	6.2 U	9.1 U	7.1 U	14 U	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Chloromethane	510 U	6.2 U	18 U	14 U	28 U	19 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
cis-1,3-Dichloropropene	510 U	6.2 U	9.1 UJ	7.1 U	14 UJ	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Dibromochloromethane	510 U	6.2 U	9.1 UJ	7.1 U	14 UJ	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Ethylbenzene	1300	1.3 J	2.4 J	0.26 J	14 UJ	9.5 U	0.84 J	1.5 J	800 J	5.5 U	5.5 U	10 U	4 J	8.9
Methylene Chloride	300 J	6.2 U	9.1 U	7.1 U	14 U	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Styrene (Monomer)	510 U	6.2 U	9.1 UJ	0.34 J	14 UJ	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 UJ	5.8 U	4.1 UJ
Tetrachloroethene	170 J	6.2 U	6 J	3.1 J	1.9 J	9.5 U	3.6 U	4.6 U	59000 J	5.5 U	5.5 U	10 UJ	5.8 U	2 J
Toluene	730	4.2 J	32 J	7.1 U	14 UJ	9.5 U	2 J	3.3 J	930 J	5.5 U	5.5 U	10 U	5.8 U	5.7
trans-1,3-Dichloropropene	510 U	6.2 U	9.1 UJ	7.1 U	14 UJ	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Trichloroethylene	510 U	6.2 U	1.5 J	0.79 J	14 UJ	9.5 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Vinyl chloride	510 U	6.2 U	18 U	14 U	28 U	19 U	3.6 U	4.6 U	NR	5.5 U	5.5 U	10 U	5.8 U	4.1 U
Xylenes, Total	6200	4.7 J	8.6 UJ	0.97 J	28 UJ	19 U	7.1 U	3.3 J	3700 J	11 U	11 U	21 U	23	39
SVOCs														
1,2,4-Trichlorobenzene	220 J	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
1,2-Dichlorobenzene	1100 J	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
1,3-Dichlorobenzene	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
1,4-Dichlorobenzene	630 J	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
2,2'-Oxybis(1-Chloropropane)	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
2,4,5-Trichlorophenol	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
2,4,6-Trichlorophenol	1300 J	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
2,4-Dichlorophenol	940 J	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
2,4-Dimethylphenol	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
2,4-Dinitrophenol	10000 U	2100 U	2100 U	2100 U	9600 UJ	1900 U	2000 UJ	2000 UJ	44000 UJ	1900 UJ	19000 U	NR	20000 U	NR
2,4-Dinitrotoluene	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
2,6-Dinitrotoluene	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
2-Chloronaphthalene	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
2-Chlorophenol	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
2-Methylnaphthalene	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
2-Methylphenol (o-Cresol)	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
2-Nitroaniline	1000 J	2100 U	2100 U	2100 U	9600 UJ	1900 U	2000 UJ	2000 UJ	44000 UJ	1900 UJ	19000 U	2400 UJ	20000 U	2300 UJ
2-Nitrophenol	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
3,3'-Dichlorobenzidine	3900 U	810 U	810 U	820 U	3700 UJ	750 U	770 UJ	770 UJ	17000 UJ	720 UJ	7300 U	920 UJ	7600 U	880 UJ
3/4-Methylphenol (m&p-Cresol)	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
3-Nitroaniline	10000 U	2100 U	2100 U	2100 U	9600 UJ	1900 U	2000 UJ	2000 UJ	44000 UJ	1900 UJ	19000 U	2400 UJ	20000 U	2300 UJ
4,6-Dinitro-2-methylphenol	10000 U	2100 U	2100 U	2100 U	9600 UJ	1900 U	2000 UJ	2000 UJ	44000 UJ	1900 UJ	19000 U	2400 UJ	20000 U	2300 UJ
4-Bromophenyl Phenyl Ether	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
4-Chloro-3-methylphenol	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
4-Chloroaniline	3900 U	810 U	810 U	820 U	3700 UJ	750 U	770 UJ	770 UJ	21000 J	720 UJ	7300 U	920 UJ	7600 U	880 UJ
4-Chlorophenyl Phenyl Ether	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
4-Nitroaniline	1000 J	2100 U	2100 U	2100 U	9600 UJ	1900 U	2000 UJ	2000 UJ	44000 UJ	1900 UJ	19000 U	2400 UJ	20000 U	2300 UJ
4-Nitrophenol	10000 U	2100 U	2100 U	2100 U	9600 UJ	1900 U	2000 UJ	2000 UJ	44000 UJ	1900 UJ	19000 U	2400 UJ	20000 U	2300 UJ
Acenaphthene	2000 U	400 U	410 U	75 J	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Acenaphthylene	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Anthracene	2000 U	400 U	410 U	230 J	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	73 J	3800 U	440 UJ

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.
NR = Not analyzed
D = Compound concentrations reported from a secondary dilution analysis.

Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	SITE O		SITE P												
	SOIL-O-5-SS 05/26/05 0.5 Ft NR	SOIL-O-6-SS 05/26/05 0.5 Ft NR	SOIL-P-1 07/16/02 0.5 Ft 3.7	SOIL-P-2 07/16/02 0.5 Ft 10	SOIL-P-3 07/17/02 0.5 Ft 3.3	SOIL-P-4 07/16/02 0.5 Ft 8.9	SA-P-1-SS 05/26/05 0.5 Ft NR	SA-P-1-SS-D 05/26/05 0.5 Ft NR	SA-P-2-SS 05/26/05 0.5 Ft NR	AT-P-2-SS 05/26/05 0.5 Ft NR	AT-P-2-SS-D 05/26/05 0.5 Ft NR	AT-P-3-SS 05/26/05 0.5 Ft NR	AT-P-4-SS 05/26/05 0.5 Ft NR	AT-P-5-SS 05/26/05 0.5 Ft NR
SVOCs															
Benzo(a)anthracene	2000 U	400 U	29 J	680	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	150 J	3600 U	290 J	3800 U	160 J
Benzo(a)pyrene	2000 U	400 U	42 J	670	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	170 J	3600 U	270 J	3800 U	240 J
Benzo(b)fluoranthene	2000 U	400 U	32 J	680	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	160 J	3600 U	340 J	3800 U	330 J
Benzo(g,h,i)perylene	2000 U	400 U	72 J	320 J	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	200 J	3600 U	180 J	3800 U	190 J
Benzo(k)fluoranthene	2000 U	400 U	30 J	570	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	140 J	3600 U	330 J	3800 U	300 J
bis(2-Chloroethoxy)methane	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
bis(2-Chloroethyl)ether	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
bis(2-Ethylhexyl)phthalate	2000 U	400 U	50 J	35 J	1800 UJ	36 J	640 J	890 J	8600 UJ	360 UJ	3600 U	54 J	3800 U	540 J
Butyl Benzyl Phthalate	79000 D	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Carbazole	2000 U	400 U	410 U	73 J	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Chrysene	2000 U	400 U	34 J	770	1800 UJ	380 U	390 UJ	30 J	8600 UJ	96 J	3600 U	350 J	3800 U	330 J
Dibenzo(a,h)anthracene	2000 U	400 U	59 J	110 J	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Dibenzofuran	2000 U	400 U	410 U	29 J	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Diethyl Phthalate	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Dimethyl Phthalate	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Di-n-butylphthalate	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	62 J	3800 U	440 UJ
Di-n-octylphthalate	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Fluoranthene	2000 U	400 U	40 J	1700	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	330 J	3600 U	760 J	3800 U	560 J
Fluorene	2000 U	400 U	410 U	65 J	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Hexachlorobenzene	510 J	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Hexachlorobutadiene	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Hexachlorocyclopentadiene	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Hexachloroethane	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Indeno(1,2,3-cd)pyrene	2000 U	400 U	66 J	240 J	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	100 J	3600 U	160 J	3800 U	190 J
Isophorone	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Naphthalene	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Nitrobenzene	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
N-Nitroso-di-n-propylamine	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
N-Nitrosodiphenylamine	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Pentachlorophenol	480000 D	39	7.1 J	4.3 J	28	11 J	790 J	18 J	59	12	9.2 U	12 U	180	580 D
Phenanthrene	2000 U	400 U	24 J	1100	1800 UJ	380 U	36 J	390 UJ	8600 UJ	170 J	3600 U	400 J	3800 U	230 J
Phenol	2000 U	400 U	410 U	360 J	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
Pyrene	2000 U	400 U	51 J	1800	1800 UJ	380 U	39 J	40 J	8600 UJ	290 J	230 J	570 J	3800 U	400 J
Pesticides															
4,4'-DDD	NR	NR	81 U	4.1 U	37 U	75 U	NR	NR	NR	NR	NR	NR	NR	NR
4,4'-DDE	NR	NR	81 U	3 J	37 U	75 U	NR	NR	NR	NR	NR	NR	NR	NR
4,4'-DDT	NR	NR	17 J	8.1 J	9.1 J	1100 J	NR	NR	NR	NR	NR	NR	NR	NR
Aldrin	NR	NR	42 U	2.1 U	19 U	39 U	NR	NR	NR	NR	NR	NR	NR	NR
alpha-BHC	NR	NR	42 UJ	2.1 U	19 UJ	39 U	NR	NR	NR	NR	NR	NR	NR	NR
alpha-Chlordane	NR	NR	42 U	1.5 J	19 U	18 J	NR	NR	NR	NR	NR	NR	NR	NR
beta-BHC	NR	NR	42 U	2.1 U	19 U	39 U	NR	NR	NR	NR	NR	NR	NR	NR
delta-BHC	NR	NR	42 UJ	2.1 U	19 UJ	39 UJ	NR	NR	NR	NR	NR	NR	NR	NR
Dieldrin	NR	NR	81 U	2 J	3 J	75 U	NR	NR	NR	NR	NR	NR	NR	NR
Endosulfan I	NR	NR	42 U	2.1 U	19 U	39 U	NR	NR	NR	NR	NR	NR	NR	NR
Endosulfan II	NR	NR	81 U	4.1 U	37 U	75 U	NR	NR	NR	NR	NR	NR	NR	NR
Endosulfan Sulfate	NR	NR	81 U	4.1 U	37 U	36 J	NR	NR	NR	NR	NR	NR	NR	NR
Endrin	NR	NR	81 U	4.1 U	37 U	75 UJ	NR	NR	NR	NR	NR	NR	NR	NR
Endrin Aldehyde	NR	NR	81 U	4.1 U	37 U	140 J	NR	NR	NR	NR	NR	NR	NR	NR
Endrin Ketone	NR	NR	81 U	4.1 UJ	37 U	9.7 J	NR	NR	NR	NR	NR	NR	NR	NR
gamma-BHC (Lindane)	NR	NR	42 U	2.1 U	19 U	39 U	NR	NR	NR	NR	NR	NR	NR	NR
gamma-Chlordane	NR	NR	42 U	2.1 U	19 U	39 U	NR	NR	NR	NR	NR	NR	NR	NR
Heptachlor	NR	NR	42 UJ	2.1 U	19 UJ	39 UJ	NR	NR	NR	NR	NR	NR	NR	NR
Heptachlor Epoxide	NR	NR	42 U	2.1 U	19 U	15 J	NR	NR	NR	NR	NR	NR	NR	NR
Methoxychlor	NR	NR	420 U	21 UJ	190 U	390 U	NR	NR	NR	NR	NR	NR	NR	NR
Toxaphene	NR	NR	4200 U	210 U	1900 U	3900 U	NR	NR	NR	NR	NR	NR	NR	NR
Herbicides															
2,4-D	20000 U	10 U	10 U	4.6 J	9.3 U	10 J	9.7 U	9.7 U	11 U	9.1 U	9.2 U	12 U	96 U	11 U
2,4-DB	20000 U	10 U	10 U	10 UJ	9.3 U	9.4 U	9.7 U	9.7 U	11 U	9.1 U	9.2 U	12 U	96 U	11 U
2,4,5-T	20000 U	10 U	10 U	10 U	9.3 U	1.4 J	9.7 U	9.7 U	11 U	9.1 U	9.2 U	12 U	96 U	11 U
2,4,5-TP (Silvex)	20000 U	10 U	10 U	10 U	9.3 U	9.4 U	9.7 U	9.7 U	11 U	9.1 U	9.2 U	12 U	96 U	11 U
Dalapon	780000 U	400 U	2500 U	2500 U	2200 U	2300 U	390 U	380 U	430 U	360 U	360 U	460 U	3800 U	430 U
Dicamba	20000 U	10 U	25 U	25 U	22 U	23 U	9.7 U	9.7 U	11 U	9.1 U	9.2 U	12 U	96 U	11 U
Dichlorprop	240000 U	120 U	120 U	2.4 J	1.2 J	9.5 J	120 U	120 U	130 U	110 U	110 U	140 U	1200 U	130 U
Dinoseb	2000 U	400 U	410 U	410 U	1800 UJ	380 U	390 UJ	390 UJ	8600 UJ	360 UJ	3600 U	460 UJ	3800 U	440 UJ
MCPA	4700000 U	2400 U	2500 U	2500 U	2200 U	2300 U	2300 U	2300 U	2600 U	2200 U	2200 U	2800 U	23000 U	2600 U
MCPP	4700000 U	2400 U	2500 U	2500 U	560 J	2300 J	4300	2300 U	2600 U	2200 U	2200 U	2800 U	23000 U	2600 U

NOTES:
U = Not detected at the MDL.
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UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.
NR = Not analyzed
D = Compound concentrations reported from a secondary dilution analysis.

Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	SITE O		SITE P											
	SOIL-O-5-SS 05/26/05 0.5 Ft NR	SOIL-O-6-SS 05/26/05 0.5 Ft NR	SOIL-P-1 07/16/02 0.5 Ft 3.7	SOIL-P-2 07/16/02 0.5 Ft 10	SOIL-P-3 07/17/02 0.5 Ft 3.3	SOIL-P-4 07/16/02 0.5 Ft 8.9	SA-P-1-SS 05/26/05 0.5 Ft NR	SA-P-1-SS-D 05/26/05 0.5 Ft NR	SA-P-2-SS 05/26/05 0.5 Ft NR	AT-P-2-SS 05/26/05 0.5 Ft NR	AT-P-2-SS-D 05/26/05 0.5 Ft NR	AT-P-3-SS 05/26/05 0.5 Ft NR	AT-P-4-SS 05/26/05 0.5 Ft NR	AT-P-5-SS 05/26/05 0.5 Ft NR
PCBs														
Decachlorobiphenyl	NR	NR	21 U	8.3 J	3 J	120	NR	NR	NR	NR	NR	NR	NR	NR
Dichlorobiphenyl	NR	NR	4.1 U	4.1 U	3.7 U	20	NR	NR	NR	NR	NR	NR	NR	NR
Heptachlorobiphenyl	NR	NR	12 U	12 U	11 U	970	NR	NR	NR	NR	NR	NR	NR	NR
Hexachlorobiphenyl	NR	NR	8.3 U	1.4 J	3.2 J	1400 J	NR	NR	NR	NR	NR	NR	NR	NR
Monochlorobiphenyl	NR	NR	4.1 U	4.1 U	3.7 U	3.8 U	NR	NR	NR	NR	NR	NR	NR	NR
Nonachlorobiphenyl	NR	NR	21 U	4 J	3 J	90	NR	NR	NR	NR	NR	NR	NR	NR
Octachlorobiphenyl	NR	NR	12 U	12 U	11 U	260	NR	NR	NR	NR	NR	NR	NR	NR
Pentachlorobiphenyl	NR	NR	8.3 U	8.4 U	2.1 J	2200 J	NR	NR	NR	NR	NR	NR	NR	NR
Tetrachlorobiphenyl	NR	NR	8.3 U	8.4 U	7.5 U	1600 J	NR	NR	NR	NR	NR	NR	NR	NR
Trichlorobiphenyl	NR	NR	4.1 U	4.1 U	3.7 U	360 J	NR	NR	NR	NR	NR	NR	NR	NR
Total PCBs	NR	NR	21 U	14	11	7020	NR	NR	NR	NR	NR	NR	NR	NR
Dioxins/Furans														
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	NR	NR	1.1 J	19	3.3	0.33 U	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,6,7,8-HpCDF	NR	NR	0.26 U	1.2 J	0.46 U	0.26 U	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8,9-HpCDF	NR	NR	0.098 U	0.1 U	0.13 U	0.13 U	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	NR	NR	0.08 U	0.16 U	0.27 U	0.18 U	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8-HxCDF	NR	NR	0.11 UJ	0.092 U	0.086 U	0.12 UJ	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	NR	NR	0.11 U	0.53 U	0.25 U	0.19 U	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,6,7,8-HxCDF	NR	NR	0.052 U	0.087 U	0.045 U	0.11 U	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	NR	NR	0.084 U	0.24 U	0.22 U	0.19 U	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8,9-HxCDF	NR	NR	0.11 U	0.076 U	0.11 U	0.12 U	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8-Pentachlorodibenzofuran	NR	NR	0.039 U	0.13 UJ	0.1 UJ	0.062 UJ	NR	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	NR	NR	0.081 U	0.47 UJ	0.24 UJ	0.22 UJ	NR	NR	NR	NR	NR	NR	NR	NR
2,3,4,6,7,8-HxCDF	NR	NR	0.063 U	0.077 U	0.093 U	0.11 U	NR	NR	NR	NR	NR	NR	NR	NR
2,3,4,7,8-PeCDF	NR	NR	0.055 U	0.29 U	0.15 U	0.12 U	NR	NR	NR	NR	NR	NR	NR	NR
2,3,7,8-TCDD	NR	NR	0.037 U	0.16 U	0.12 U	0.098 U	NR	NR	NR	NR	NR	NR	NR	NR
2,3,7,8-Tetrachlorodibenzofuran	NR	NR	0.027 U	0.11 U	0.12 U	0.069 U	NR	NR	NR	NR	NR	NR	NR	NR
OCDD	NR	NR	13 U	540 J	43 J	4.6 U	NR	NR	NR	NR	NR	NR	NR	NR
OCDF	NR	NR	1.3 U	33	7.5	0.92 U	NR	NR	NR	NR	NR	NR	NR	NR
Total HpCDD	NR	NR	2	38	5.9	0.33 U	NR	NR	NR	NR	NR	NR	NR	NR
Total HpCDF	NR	NR	0.66	6.6	1.3	0.26 U	NR	NR	NR	NR	NR	NR	NR	NR
Total HxCDD	NR	NR	0.11 U	0.85	0.3 U	0.23 U	NR	NR	NR	NR	NR	NR	NR	NR
Total HxCDF	NR	NR	0.11 UJ	0.79 U	0.18 U	0.16 U	NR	NR	NR	NR	NR	NR	NR	NR
Total PeCDD	NR	NR	0.18 U	0.47 UJ	0.3 UJ	0.53 UJ	NR	NR	NR	NR	NR	NR	NR	NR
Total PeCDF	NR	NR	0.055 U	0.29 UJ	0.36 UJ	0.25 UJ	NR	NR	NR	NR	NR	NR	NR	NR
Total TCDD	NR	NR	0.037 U	0.16 U	0.12 U	0.098 U	NR	NR	NR	NR	NR	NR	NR	NR
Total TCDF	NR	NR	0.027 U	0.15 U	0.12 U	0.19 U	NR	NR	NR	NR	NR	NR	NR	NR
Metals														
Aluminum	5600	6700	4000	6000	3200	6000	8300	8700	2900	7200	7200	3600	5400	4600
Antimony	1.6 J	2.3 U	1.6 J	0.62 J	0.56 J	1.9 UJ	2.3 U	2.2 U	1 J	0.63 J	0.9 J	1.3 J	1 J	1.2 J
Arsenic	8.6	5.3	26 J	9.4	17 J	4 J	4.8	4.4	15	7.2	7.5	14	15	7.4
Barium	330	180	120	180 J	87	77	150	160	100	150	140	86	720 J	83
Beryllium	0.51	0.42 J	1.8	0.85	1.5	0.42	0.5	0.53	1.1	0.63	0.69	1	1.3	0.33 J
Cadmium	32	0.4 J	2	3	1	0.62	0.83	0.87	1.1	3.6	3.9	25	4.9	5.4
Calcium	14000	13000	3200	70000	6600	13000	65000	63000	50000	65000	68000	76000	40000	190000
Chromium	42	10	19	14	16	13	13	14	27	14	15	17	100	13
Cobalt	6.7	5.2	13 J	7.6 J	9.7 J	6.2 J	5.2	5.9	5.7	6.2	6.5	7.8	10	3.5
Copper	680	15	64	59 J	51	21	18	19	41	52	57	250	140	26
Iron	12000	11000	9200	11000	7300	12000	12000	12000	17000	11000	11000	6300	32000	6400
Lead	150	14	74	170 J	57	15	2000 J	70 J	110	110	130	150	130	100
Magnesium	1900	5800	460	4300	780	7900	5600	5500	1500	11000	8900	5400	3900	12000
Manganese	260	260	31	360 J	80	390	330	390	100	260	260	230	2700	190
Mercury	21	0.029	0.23	0.072 J	0.088	0.068	0.059	0.073	0.53 J	0.23	0.21	0.12	2.3	5.6
Nickel	140	13	47	21	25	17	15	16	21	18	19	22	130 J	12
Potassium	580	1300	690 J	1400 J	550 J	990 J	1700	1800	560	1700	1700	630	1000 J	1200
Selenium	3.1	2.9 U	7	1.1 UJ	1.6	0.95 U	2.9 U	2.7 U	1.6 J	2.7 U	2.5 U	2.2 J	1.8 J	3.2 U
Silver	4.2	1.2 U	0.22 J	0.23 J	0.13 J	0.95 U	0.25 J	1.1 U	1.2 U	0.22 J	0.25 J	1.4	0.92 J	0.59 J
Sodium	300	150	260	180	250	47 U	190	170	510	260	220	400	550 J	320
Thallium	2.8 U	2.9 U	1.3	1.1 U	1 U	0.95 U	2.9 U	2.7 U	3.1 U	2.7 U	2.5 U	3.3 U	2.6 U	3.2 U
Vanadium	16	20	44	21	26	25	23	23	25	23	25	24	260	15
Zinc	2400	58	200 J	390 J	190 J	85 J	120	130	200	470	480	3100	2700	670

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Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	Sample ID / Sample Date / Sample Depth / Percent Moisture	SITE Q													
		SOIL-Q-9 07/26/02 0.5 Ft 19.8	SOIL-Q-10 07/26/02 0.5 Ft 14.9	SOIL-Q-10 DUP 07/26/02 0.5 Ft 12.3	SOIL-Q-11 07/22/02 0.5 Ft 33.6	SOIL-Q-11 DUP 07/22/02 0.5 Ft 30.6	SOIL-Q-12 07/22/02 0.5 Ft 20.8	SOIL-Q-13 10/07/02 0.5 Ft 22.6	SOIL-Q-14 10/07/02 0.5 Ft 18.6	SOIL-Q-15 10/07/02 0.5 Ft 26.1	SOIL-Q-16 10/07/02 0.5 Ft 19.1	SOIL-Q-17 10/07/02 0.5 Ft 15.8	SOIL-Q-18 10/07/02 0.5 Ft 14.9	SOIL-Q-19 10/07/02 0.5 Ft 20.7	SOIL-Q-20 10/07/02 0.5 Ft 22.2
VOCs	**Units**														
1,1,1-Trichloroethane	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
1,1,2,2-Tetrachloroethane	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
1,1,2-Trichloroethane	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
1,1-Dichloroethane	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
1,1-Dichloroethylene	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
1,2-Dichloroethane	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
1,2-Dichloroethene (total)	ug/kg	15 U	18 U	17 U	25 U	21 U	12 U	14 U	12 U	15 U	12 U	13 U	14 U	12 U	15 U
1,2-Dichloropropane	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
2-Butanone (MEK)	ug/kg	38 U	45 U	42 U	62 U	52 U	31 U	35 U	31 U	2.3 J	11 J	14 J	6.4 J	4.6 J	24 J
2-Hexanone	ug/kg	38 U	45 U	42 U	62 U	52 U	31 U	35 U	31 U	5.7 J	150	190	26 J	25 J	120
4-Methyl-2-pentanone (MIBK)	ug/kg	38 U	45 U	42 U	4.3 J	3 J	31 U	35 U	31 U	38 U	7.5 J	5.8 J	34 U	29 U	7.3 J
Acetone	ug/kg	76 U	91 U	85 U	120 U	100 U	62 U	70 U	62 U	20 J	150 J	180 J	91	60 U	260 J
Benzene	ug/kg	7.6 U	9.1 U	8.5 U	5.7 J	10 U	6.2 U	7 U	6.2 U	7.5 U	1.8 J	1.5 J	2.4 J	5.8 U	1.5 J
Bromodichloromethane	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
Bromoform	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
Bromomethane	ug/kg	15 U	18 U	17 U	25 U	21 U	12 U	14 U	12 U	15 U	12 U	13 U	14 U	12 U	15 U
Carbon Disulfide	ug/kg	0.66 J	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	2.7 J	4.5 J	4.8 J	5.8 U	4 J
Carbon Tetrachloride	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
Chlorobenzene	ug/kg	7.6 U	9.1 U	8.5 U	45 J	10 J	6.2 U	7 U	6.2 U	7.5 U	6.1 U	0.67 J	0.36 J	5.8 U	1.1 J
Chloroethane	ug/kg	15 U	18 U	17 U	25 U	21 U	12 U	14 U	12 U	15 U	12 U	13 U	14 U	12 U	15 U
Chloroform	ug/kg	7.6 U	9.1 U	8.5 U	1.8 J	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
Chloromethane	ug/kg	15 U	18 U	17 U	25 U	21 U	12 U	14 U	12 U	15 U	12 U	13 U	14 U	12 U	15 U
cis-1,3-Dichloropropene	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
Dibromochloromethane	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
Ethylbenzene	ug/kg	0.38 J	9.1 U	8.5 U	5 J	21	6.2 U	7 U	0.5 J	0.23 J	0.74 J	0.71 J	0.52 J	0.45 J	0.48 J
Methylene Chloride	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	3.6 J
Styrene (Monomer)	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
Tetrachloroethene	ug/kg	2.1 J	0.6 J	0.47 J	0.96 J	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
Toluene	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	1.2 J	1.8 J	1.3 J	5.3 J	3.4 J	4.2 J	1 J	18
trans-1,3-Dichloropropene	ug/kg	7.6 U	9.1 U	8.5 U	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
Trichloroethylene	ug/kg	1.7 J	1.2 J	1.3 J	12 U	10 U	6.2 U	7 U	6.2 U	7.5 U	6.1 U	6.4 U	6.8 U	5.8 U	7.3 U
Vinyl chloride	ug/kg	15 U	18 U	17 U	25 U	21 U	12 U	14 U	12 U	15 U	12 U	13 U	14 U	12 U	15 U
Xylenes, Total	ug/kg	1.2 J	0.85 J	0.93 J	67 J	250 J	12 U	0.74 J	2.6 J	0.8 J	2.4 J	1.7 J	0.78 J	0.56 J	1.8 J
SVOCs															
1,2,4-Trichlorobenzene	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
1,2-Dichlorobenzene	ug/kg	420 UJ	410 U	3900 U	31 J	31 J	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
1,3-Dichlorobenzene	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
1,4-Dichlorobenzene	ug/kg	420 UJ	410 U	3900 U	430 J	270 J	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
2,4,5-Trichlorophenol	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
2,4,6-Trichlorophenol	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
2,4-Dichlorophenol	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
2,4-Dimethylphenol	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
2,4-Dinitrophenol	ug/kg	2200 UJ	2100 U	20000 U	2400 UJ	2500 UJ	2100 U	2400 U	2100 U	2300 U	2200 UJ	2100 UJ	2000 U	2200 UJ	2200 UJ
2,4-Dinitrotoluene	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 UJ	400 UJ	380 U	420 UJ	430 UJ
2,6-Dinitrotoluene	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
2-Chloronaphthalene	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
2-Chlorophenol	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
2-Methylnaphthalene	ug/kg	420 UJ	410 U	3900 U	62 J	48 J	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
2-Methylphenol (o-Cresol)	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
2-Nitroaniline	ug/kg	2200 UJ	2100 U	20000 U	2400 U	2500 U	2100 U	2400 U	2100 U	2300 U	2200 UJ	2100 UJ	2000 U	2200 UJ	2200 UJ
2-Nitrophenol	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
3,3'-Dichlorobenzidine	ug/kg	850 UJ	810 U	7800 U	940 U	960 U	810 U	930 U	800 U	890 U	840 U	800 U	760 U	850 U	870 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
3-Nitroaniline	ug/kg	2200 UJ	2100 U	20000 U	2400 U	2500 U	2100 U	2400 U	2100 U	2300 U	2200 U	2100 U	2000 U	2200 U	2200 U
4,6-Dinitro-2-methylphenol	ug/kg	2200 UJ	2100 U	20000 U	2400 U	2500 U	2100 U	2400 U	2100 U	2300 U	2200 UJ	2100 UJ	2000 U	2200 UJ	2200 UJ
4-Bromophenyl Phenyl Ether	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
4-Chloro-3-methylphenol	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
4-Chloroaniline	ug/kg	850 UJ	810 U	7800 U	940 U	960 U	810 U	930 U	800 U	890 U	840 U	800 U	760 U	850 U	870 U
4-Chlorophenyl Phenyl Ether	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
4-Nitroaniline	ug/kg	2200 UJ	2100 U	20000 U	2400 U	2500 U	2100 U	2400 U	2100 U	2300 U	2200 U	2100 U	2000 U	2200 U	2200 U
4-Nitrophenol	ug/kg	2200 UJ	2100 U	20000 U	2400 U	2500 U	2100 U	2400 U	2100 U	2300 U	2200 UJ	2100 UJ	2000 U	2200 UJ	2200 UJ
Acenaphthene	ug/kg	51 J	37 J	260 J	63 J	130 J	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Acenaphthylene	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Anthracene	ug/kg	340 J	200 J	1400 J	230 J	820	410 U	460 U	400 U	65 J	420 U	400 U	380 U	420 U	430 U

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Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	SITE Q SOIL-Q-9 07/26/02 0.5 Ft 19.8	SOIL-Q-10 07/26/02 0.5 Ft 14.9	SOIL-Q-10 DUP 07/26/02 0.5 Ft 12.3	SOIL-Q-11 07/22/02 0.5 Ft 33.6	SOIL-Q-11 DUP 07/22/02 0.5 Ft 30.6	SOIL-Q-12 07/22/02 0.5 Ft 20.8	SOIL-Q-13 10/07/02 0.5 Ft 22.6	SOIL-Q-14 10/07/02 0.5 Ft 18.6	SOIL-Q-15 10/07/02 0.5 Ft 26.1	SOIL-Q-16 10/07/02 0.5 Ft 19.1	SOIL-Q-17 10/07/02 0.5 Ft 15.8	SOIL-Q-18 10/07/02 0.5 Ft 14.9	SOIL-Q-19 10/07/02 0.5 Ft 20.7	SOIL-Q-20 10/07/02 0.5 Ft 22.2
SVOCs	**Units**														
Benzo(a)anthracene	ug/kg	1800 J	530	4500	740	2100	30 J	460 U	400 U	85 J	65 J	210 J	45 J	41 J	45 J
Benzo(a)pyrene	ug/kg	1800 J	650	5300	680	1900	410 U	460 U	400 U	92 J	75 J	180 J	48 J	46 J	40 J
Benzo(b)fluoranthene	ug/kg	3300 J	580	4800	750	2200	33 J	460 U	400 U	440 U	69 J	210 J	380 U	56 J	36 J
Benzo(g,h,i)perylene	ug/kg	420 UJ	370 J	3800 J	280 J	720	410 U	460 U	400 U	64 J	78 J	130 J	52 J	43 J	37 J
Benzo(k)fluoranthene	ug/kg	420 UJ	600	4400	700	1700	32 J	39 J	400 U	79 J	71 J	240 J	44 J	55 J	47 J
bis(2-Chloroethoxy)methane	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
bis(2-Chloroethyl)ether	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
bis(2-Ethylhexyl)phthalate	ug/kg	540 J	25 J	300 J	13000 J	4200 J	780 J	50 J	63 J	220 J	66 J	400 U	32 J	420 U	430 U
Butyl Benzyl Phthalate	ug/kg	870 J	410 U	3900 U	550	180 J	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Carbazole	ug/kg	79 J	81 J	670 J	84 J	270 J	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Chrysene	ug/kg	2400 J	590	5100	710	2100	42 J	28 J	23 J	99 J	65 J	240 J	68 J	59 J	45 J
Dibenzo(a,h)anthracene	ug/kg	420 UJ	410 U	3900 U	86 J	280 J	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Dibenzofuran	ug/kg	29 J	24 J	3900 U	46 J	120 J	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Diethyl Phthalate	ug/kg	420 UJ	410 U	3900 U	78 J	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Dimethyl Phthalate	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Di-n-butylphthalate	ug/kg	110 J	410 U	3900 U	160 J	66 J	410 U	460 U	55 J	440 U	51 J	400 U	380 U	420 U	430 U
Di-n-octylphthalate	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Fluoranthene	ug/kg	3200 J	960	8000	1900	4200	57 J	460 U	400 U	120 J	120 J	320 J	96 J	60 J	95 J
Fluorene	ug/kg	62 J	34 J	3900 U	96 J	240 J	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Hexachlorobenzene	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Hexachlorobutadiene	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Hexachlorocyclopentadiene	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Hexachloroethane	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Indeno(1,2,3-cd)pyrene	ug/kg	420 UJ	410 U	3900 U	180 J	440 J	410 U	460 U	400 U	49 J	420 U	120 J	45 J	420 U	430 U
Isophorone	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Naphthalene	ug/kg	420 UJ	410 U	3900 U	490	170 J	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Nitrobenzene	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
N-Nitroso-di-n-propylamine	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
N-Nitrosodiphenylamine	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Pentachlorophenol	ug/kg	26 U	25 U	36 U	2300 J	3600 J	36 J	5.2 J	5.5 J	2.4 J	2 J	1.1 J	20 U	1.5 J	2 J
Phenanthrene	ug/kg	1600 J	940	6300	780 J	2800 J	26 J	460 U	400 U	65 J	58 J	38 J	44 J	420 U	45 J
Phenol	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 U	400 U	380 U	420 U	430 U
Pyrene	ug/kg	3300 J	1300	8600	2000	4200	53 J	460 U	400 U	140 J	420 U	280 J	93 J	420 U	430 U
Pesticides															
4,4'-DDD	ug/kg	42 U	4.1 U	7.8 UJ	94 U	96 U	81 U	46 U	20 UJ	44 U	4.2 U	4 U	3.8 UJ	5.7 J	1.2 J
4,4'-DDE	ug/kg	42 U	4.1 U	7.8 UJ	570 J	560 J	81 R	43 J	20 U	44 U	1.5 J	4 U	3.8 U	0.81 J	0.71 J
4,4'-DDT	ug/kg	2600 J	5.3 J	78 J	1500 J	1400 J	790 J	71 J	39 J	530 J	5.1 J	2.1 J	38 UJ	44 J	43 UJ
Aldrin	ug/kg	22 U	2.1 U	4 UJ	48 U	49 U	42 U	24 U	10 U	23 U	2.2 U	2.1 U	2 U	2.2 U	2.2 U
alpha-BHC	ug/kg	22 U	2.1 U	4 UJ	170	200 J	42 U	24 U	10 U	23 U	2.2 U	2.1 U	2 U	2.2 U	2.2 U
alpha-Chlordane	ug/kg	33	2.1 U	5.2 J	53 J	60 J	14 J	14 J	10 U	3.9 J	2.2 U	2.1 U	0.15 J	2.2 U	2.2 U
beta-BHC	ug/kg	11 J	2.1 U	4 UJ	48 U	49 U	42 U	24 U	10 U	23 U	2.2 U	2.1 U	2 U	2.2 U	2.2 U
delta-BHC	ug/kg	22 U	2.1 U	4 UJ	48 U	49 U	42 U	24 U	10 U	23 U	2.2 U	2.1 U	2 U	2.2 U	2.2 U
Dieldrin	ug/kg	42 UJ	2.6 J	15 J	400 J	350 J	280	100	2.2 J	160	3.3 J	0.66 J	3.8 U	4.2 U	0.41 J
Endosulfan I	ug/kg	22 U	2.1 U	4 UJ	48 U	49 U	42 U	24 U	10 U	23 U	2.2 U	2.1 U	2 U	2.2 U	2.2 U
Endosulfan II	ug/kg	42 U	1 J	1.5 J	94 U	96 U	81 U	46 U	20 U	44 U	4.2 U	4 U	3.8 U	4.2 U	4.3 U
Endosulfan Sulfate	ug/kg	42 U	4.1 U	7.8 UJ	32 J	43 J	20 J	5.5 J	20 U	44 U	4.2 U	4 U	3.8 U	4.2 U	4.3 U
Endrin	ug/kg	170 J	2.4 J	7.8 UJ	94 U	96 U	81 U	46 U	20 U	44 U	4.2 U	4 U	3.8 U	4.2 U	4.3 U
Endrin Aldehyde	ug/kg	42 UJ	1.4 J	15 J	94 UJ	96 UJ	81 UJ	12 J	20 U	17 J	4.2 U	4 U	3.8 U	0.92 J	4.3 U
Endrin Ketone	ug/kg	42 U	4.9 J	7.8 UJ	110 J	110 J	81 U	46 U	20 U	44 U	4.2 U	4 U	0.69 J	1.2 J	0.52 J
gamma-BHC (Lindane)	ug/kg	22 U	2.1 U	4 UJ	48 U	49 U	42 U	24 U	10 U	23 U	2.2 U	2.1 U	2 U	2.2 U	2.2 U
gamma-Chlordane	ug/kg	150 J	1.7 J	24 J	410 J	390 J	42 UJ	24 U	10 U	23 U	0.53 J	0.55 J	2 U	2.2 U	2.2 U
Heptachlor	ug/kg	22 U	2.1 U	4 UJ	48 UJ	49 UJ	42 UJ	24 U	10 U	23 U	2.2 U	2.1 U	2 U	2.2 U	2.2 U
Heptachlor Epoxide	ug/kg	76 J	0.52 J	4.8 J	48 U	49 U	42 U	24 U	12 J	23 U	2.2 U	2.1 U	0.23 J	0.5 J	0.57 J
Methoxychlor	ug/kg	92 J	21 U	40 UJ	480 U	490 U	420 U	240 UJ	210 UJ	230 UJ	22 UJ	21 UJ	200 U	220 U	220 U
Toxaphene	ug/kg	2200 U	210 U	400 UJ	4800 U	4900 U	4200 U	2400 U	1000 U	2300 U	220 U	210 U	200 U	220 U	220 U
Herbicides															
2,4-D	ug/kg	6.7 J	8.6 J	15	240 U	12 U	4.7 J	12 J	10 U	8.7 J	6.9 J	7.8 J	7.9 J	6.4 J	14 J
2,4-DB	ug/kg	11 U	28 J	9.9 U	240 U	12 UJ	10 UJ	12 U	10 U	11 U	10 U	10 U	9.5 U	11 U	11 U
2,4,5-T	ug/kg	11 U	10 U	1.3 J	240 U	7.4 J	10 UJ	12 U	10 U	11 U	10 U	10 U	9.5 U	11 U	11 U
2,4,5-TP (Silvex)	ug/kg	11 U	10 U	9.9 U	240 U	12 UJ	10 UJ	12 U	10 U	11 U	10 U	10 U	9.5 U	11 U	11 U
Dalapon	ug/kg	2600 U	2500 U	2400 U	57000 U	2900 U	2500 U	2800 U	2400 U	2700 U	2500 U	2400 U	2300 U	2600 U	2600 U
Dicamba	ug/kg	26 U	25 U	24 U	570 U	29 U	25 U	28 U	24 U	27 U	25 U	24 U	23 U	26 U	26 U
Dichlorprop	ug/kg	130 U	120 U	1.5 J	2800 U	140 U	3.7 J	140 U	120 U	140 U	130 U	6.1 J	110 U	6.2 J	130 U
Dinoseb	ug/kg	420 UJ	410 U	3900 U	470 U	480 U	410 U	460 U	400 U	440 U	420 UJ	400 UJ	380 U	420 UJ	430 UJ
MCPA	ug/kg	2600 U	2500 U	2400 U	57000 U	720 J	1100 J	600 J	3700 J	2700 U	1600 J	2400 U	720 J	2800 J	2600 U
MCPP	ug/kg	2600 U	2500 U	2400 U	57000 U	5200 J	2000 J	750 J	1500 J	1700 J	2200 J	2400 U	2300 U	2600 J	3100 J

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PCBs	**Units**														
Decachlorobiphenyl	ug/kg	1100 U	210 U	200 U	240 U	250 U	21 U	24 U	210 U	230 U	22 U	21 U	20 U	22 U	22 U
Dichlorobiphenyl	ug/kg	210 U	41 U	39 U	110	120	4.1 U	6.2	40 U	44 U	4.2 U	4 U	3.8 U	4.2 U	4.3 U
Heptachlorobiphenyl	ug/kg	2800	65 J	110 J	520	320	350	91	97 J	26 J	2 J	12 U	11 U	13 U	13 U
Hexachlorobiphenyl	ug/kg	2600	220	250	1900	1400	740	170	220	72 J	4.5 J	8.2 U	7.7 U	8.6 U	8.8 U
Monochlorobiphenyl	ug/kg	210 U	8.5 J	8.2 J	47 U	48 U	4.1 U	4.6 U	40 U	44 U	4.2 U	4 U	3.8 U	4.2 U	4.3 U
Nonachlorobiphenyl	ug/kg	1100 U	210 U	200 U	240 U	250 U	21 U	24 U	210 U	230 U	22 U	21 U	20 U	22 U	22 U
Octachlorobiphenyl	ug/kg	570 J	120 U	120 U	59 J	75 J	75	20	120 U	140 U	13 U	12 U	11 U	13 U	13 U
Pentachlorobiphenyl	ug/kg	2100	520	590	5600	5500	1200	330	1300	180	8.4 J	8.2 U	7.7 U	1.3 J	8.8 U
Tetrachlorobiphenyl	ug/kg	2600	230	550	3600	4700	490	430	970	45 J	8.5 U	8.2 U	7.7 U	8.6 U	8.8 U
Trichlorobiphenyl	ug/kg	130 J	29 J	55	1200	1700	24	68	40 U	44 U	4.2 U	4 U	3.8 U	4.2 U	4.3 U
Total PCBs	ug/kg	10800	1073	1563	12989	13815	2883	1115	2587	323	15	21 U	20 U	1.3	22 U
Dioxins/Furans															
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	7 J	17 J	16 J	400 J	120 J	3.2 J	2.6	2.1	0.94 J	0.26 U	0.2 U	0.2 U	0.62 U	0.23 U
1,2,3,4,6,7,8-HpCDF	ug/kg	1.8 J	2.4 J	1.6 J	61	21	0.75 U	0.44 U	0.5 U	0.27 U	0.27 U	0.29 U	0.33 U	0.39 U	0.39 U
1,2,3,4,7,8,9-HpCDF	ug/kg	0.71 UJ	0.48 UJ	0.27 UJ	6.1	13	0.15 U	0.11 U	0.18 U	0.15 U	0.17 U	0.15 U	0.18 U	0.22 U	0.32 U
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	0.39 UJ	0.31 UJ	0.46 UJ	0.64 U	0.21 U	0.088 U	0.055 U	0.062 U	0.044 U	0.025 U	0.024 U	0.018 U	0.03 U	0.013 U
1,2,3,4,7,8-HxCDF	ug/kg	0.93 J	0.97 J	0.37 UJ	5	15	0.2 U	0.15 U	0.036 U	0.17 U	0.12 U	0.044 U	0.049 U	0.12 U	0.077 U
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	0.63 UJ	0.69 UJ	0.47 UJ	12 J	2.7 J	0.2 U	0.056 UJ	0.1 UJ	0.11 UJ	0.075 UJ	0.069 UJ	0.087 UJ	0.099 UJ	0.11 UJ
1,2,3,6,7,8-HxCDF	ug/kg	0.65 UJ	0.38 UJ	0.073 UJ	1.3 J	4 J	0.22 U	0.057 U	0.082 U	0.086 U	0.053 U	0.039 U	0.046 U	0.06 U	0.053 U
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	ug/kg	0.68 UJ	0.43 UJ	0.42 UJ	0.4 U	0.2 U	0.064 U	0.14 U	0.091 U	0.07 U	0.061 U	0.045 U	0.082 U	0.11 U	0.057 U
1,2,3,7,8,9-HxCDF	ug/kg	0.72 UJ	0.35 UJ	0.15 UJ	0.51 UJ	1.7 J	0.11 UJ	0.07 U	0.056 U	0.062 U	0.057 U	0.057 U	0.07 U	0.11 U	0.089 U
1,2,3,7,8-Pentachlorodibenzofuran	ug/kg	0.43 UJ	0.28 UJ	0.096 UJ	0.42 U	0.94 J	0.063 U	0.075 U	0.047 U	0.059 U	0.04 U	0.043 U	0.063 U	0.075 U	0.064 U
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	ug/kg	0.4 UJ	0.25 UJ	0.095 UJ	0.31 U	0.41 U	0.12 U	0.35 U	0.2 U	0.35 U	0.14 U	0.16 U	0.45 U	0.29 U	0.37 U
2,3,4,6,7,8-HxCDF	ug/kg	0.71 UJ	0.44 UJ	0.15 UJ	0.84 U	2.5	0.081 U	0.085 U	0.049 U	0.059 U	0.058 U	0.045 U	0.05 U	0.058 U	0.069 U
2,3,4,7,8-PeCDF	ug/kg	0.55 UJ	0.39 UJ	0.15 UJ	1.3 J	3.4	0.051 U	0.17 U	0.11 U	0.094 U	0.087 U	0.082 U	0.086 U	0.09 U	0.1 U
2,3,7,8-TCDD	ug/kg	0.14 UJ	0.088 UJ	0.055 UJ	0.23 U	0.13 U	0.029 U	0.038 U	0.033 U	0.025 U	0.026 U	0.028 U	0.035 U	0.032 U	0.024 U
2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.3 UJ	0.26 UJ	0.074 UJ	0.13 U	0.27 U	0.2 U	0.18 U	0.085 U	0.08 U	0.021 U	0.022 U	0.03 U	0.033 U	0.025 U
OCDD	ug/kg	87 J	240 J	250 J	3600 J	1200 J	26	37	26	15	5.1	5.2	75	29	6.9
OCDF	ug/kg	6.6 J	7.8 J	7.4 J	420 J	120 J	3.1 J	1.8 J	1.9 J	0.43 UJ	0.25 UJ	0.32 UJ	0.3 UJ	0.61 UJ	0.5 UJ
Total HpCDD	ug/kg	13 J	34 J	32 J	630 J	180 J	5.3 J	4.8	3.7	1.8	0.26 U	0.3 U	0.2 U	0.62 U	0.29 U
Total HpCDF	ug/kg	5 J	7.3 J	6.3 J	360 J	110 J	2 J	1.3	1.3	0.31 U	0.27 U	0.29 U	0.33 U	0.39 U	0.39 U
Total HxCDD	ug/kg	1.9 J	0.97 J	0.9 J	34 J	11 J	0.23 U	0.21 UJ	0.49 UJ	0.11 UJ	0.075 UJ	0.069 UJ	0.087 UJ	0.11 UJ	0.11 UJ
Total HxCDF	ug/kg	1.8 J	2.8 J	1 J	59	47	0.51 U	0.79	0.21 U	0.19 U	0.13 U	0.068 U	0.087 U	0.14 U	0.11 U
Total PeCDD	ug/kg	0.4 UJ	0.41 UJ	0.13 UJ	1.6 U	0.53 U	0.33 U	0.39 U	0.3 U	0.42 U	0.36 U	0.27 U	0.47 U	0.29 U	0.37 U
Total PeCDF	ug/kg	0.64 UJ	0.52 UJ	0.26 UJ	3.6 J	13 J	0.23 U	0.27 U	0.14 U	0.12 U	0.1 U	0.099 U	0.16 U	0.13 U	0.12 U
Total TCDD	ug/kg	0.22 UJ	0.53 J	0.48 J	0.34 U	0.21 U	0.053 U	0.038 U	0.033 U	0.025 U	0.026 U	0.028 U	0.035 U	0.032 U	0.024 U
Total TCDF	ug/kg	1.5 J	1.9 J	0.29 J	1.6	3.6	0.2 U	0.18 U	0.09 U	0.082 U	0.067 U	0.07 U	0.06 U	0.062 U	0.11 U
Metals															
Aluminum	mg/kg	11000	10000	11000	11000	9900	12000	14000	7200	11000	7600	4000	3800	7400	9000
Antimony	mg/kg	47 J	3 J	2.5 J	26 J	20 J	2.2 UJ	2.6 U	2.2 U	2.7 U	2.5 U	2.2 U	2.1 U	2.3 U	2.6 U
Arsenic	mg/kg	33	20	14	18	17	6	7.9	5.1	5	5.5	4.2	3.3	4.3	7.1
Barium	mg/kg	1000	690	730	1300	1500	200	250	180	180	150	100	86	160	170
Beryllium	mg/kg	0.54	0.71	0.79	0.64	0.62	0.82	0.99	0.53	0.97	0.54	0.31 J	0.28 J	0.54	0.71
Cadmium	mg/kg	22	13	11	30	29	1.4	2.4	1.8	1.9 J	1 J	0.92	0.41 J	1 J	1.6 J
Calcium	mg/kg	22000	12000	13000	70000	73000	9800	13000	11000	9000	11000	8400	7400	9300	8900
Chromium	mg/kg	660	51	48	170	150	20	24	17	20	13	8.2	8	13	16
Cobalt	mg/kg	20	12	11	16	16	8.8	11 J	6.8 J	8.6 J	6.8 J	5.2 J	5 J	6.8 J	8.4 J
Copper	mg/kg	710 J	300 J	410 J	2600	870	33	42	86	35	21	10	7	20	21
Iron	mg/kg	90000	71000	40000	59000	63000	19000	24000	14000	19000	15000	9600	9200	14000	17000
Lead	mg/kg	3100	390	490	2600	2000	47	60	62	48	27	20	15	30	29
Magnesium	mg/kg	3800	3100	3300	4000	5700	4300	4900	4200	4300	5000	3000	2700	4200	4100
Manganese	mg/kg	2100	670	520	790	680	460	660	380	320	380	320	290	370	630
Mercury	mg/kg	1 J	2.5 J	2.7 J	2.3	4.1	0.059	0.14	0.13	0.16	0.078	0.036	0.021 J	0.052	0.065
Nickel	mg/kg	500	61	49	77	77	22	27	29	22	17	12	11	16	19
Potassium	mg/kg	970	900	1000	1100 J	1100 J	1600 J	2300	1300	1600	1400	810	710	1200	1500
Selenium	mg/kg	2.6 U	1.1 U	1 U	3 J	2.5 J	1.1 UJ	1.3 U	1.1 U	1.4 U	1.3 U	1.1 U	1 U	1.2 U	1.3 U
Silver	mg/kg	12	2	2.5	17	8.3	1.1 U	0.18 J	0.11 J	1.4 U	1.3 U	1.1 U	1 U	1.2 U	1.3 U
Sodium	mg/kg	420	190 U	200 U	620	480	110 U	99 U	100 U	110 U	100 U	78 U	78 U	110 U	100 U
Thallium	mg/kg	2.3 U	1.1 U	1.2 U	1.4 U	6.6 U	1.1 U	1.9	1.1 U	0.97 J	1.1 J	1.1 U	1 U	0.79 J	1.3 U
Vanadium	mg/kg	27	30	32	26	28	30	36	21	31	22	14	13	22	26
Zinc	mg/kg	3000 J	1200 J	1200 J	3400	3600	210	260	240	260	140	140	100	160	270

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.

Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	SITE Q											
		AT-Q-33-SS 5/26/05 0.5 Ft NR	AT-Q-34-SS 5/26/05 0.5 Ft NR	AT-Q-35-SS 5/26/05 0.5 Ft NR	AT-Q-36-SS 5/26/05 0.5 Ft NR	SA-Q-9-SS 5/26/05 0.5 Ft NR	SA-Q-10-SS 5/26/05 0.5 Ft NR	SA-Q-10-SS-D 5/26/05 0.5 Ft NR	SA-Q-11-SS 5/26/05 0.5 Ft NR	SA-Q-12-SS 5/26/05 0.5 Ft NR	SA-Q-14-SS 5/26/05 0.5 Ft NR	SA-Q-15-SS 5/26/05 0.5 Ft NR	SA-Q-16-SS 5/26/05 0.5 Ft NR
VOCs	**Units**												
1,1,1-Trichloroethane	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
1,1,2,2-Tetrachloroethane	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
1,1,2-Trichloroethane	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
1,1-Dichloroethane	ug/kg	4.7 U	4.4 U	6.1 U	4.5 UJ	5.1 U	5 U	4.7 UJ	5.3 U	5.5 UJ	4.4 U	4 U	4.6 UJ
1,1-Dichloroethylene	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
1,2-Dichloroethane	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
1,2-Dichloroethene (total)	ug/kg	16	8.8 U	12 U	9.1 U	10 U	9.9 U	6.9 J	11 U	11 U	8.7 U	8 U	9.2 U
1,2-Dichloropropane	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
2-Butanone (MEK)	ug/kg	24 U	9.1 J	11 J	5.7 J	7.4 J	6.3 J	29 J	27 UJ	17 J	22	9.8 J	23 U
2-Hexanone	ug/kg	24 U	22 U	30 U	23 U	26 U	25 U	24 UJ	27 U	28 U	22 U	20 U	23 U
4-Methyl-2-pentanone (MIBK)	ug/kg	24 U	22 U	16 J	23 U	26 U	12 J	29 J	27 U	28 U	22 U	20 U	23 U
Acetone	ug/kg	13 J	70	23 J	51	91	55	67 J	220	130	200	97	62
Benzene	ug/kg	3.3 J	4.4 U	1.9 J	1.6 J	5.1 U	10	18 J	7.5	2.3 J	5.6	4 U	1.1 J
Bromodichloromethane	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
Bromoform	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
Bromomethane	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
Carbon Disulfide	ug/kg	3.1 J	5.4	6.1 U	4.5 U	2.4 J	5 U	1.9 J	5.3 U	7.6	3.9 J	7.4	2.3 J
Carbon Tetrachloride	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
Chlorobenzene	ug/kg	1.3 J	4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	3.2 J	5.5 U	10	4 U	4.6 U
Chloroethane	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
Chloroform	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
Chloromethane	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
cis-1,3-Dichloropropene	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
Dibromochloromethane	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
Ethylbenzene	ug/kg	1.2 J	4.4 U	1.5 J	4.5 U	5.1 U	1.1 J	3.2 J	2.1 J	5.5 U	1.3 J	4 U	4.6 U
Methylene Chloride	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	2.9 J	5.5 U	4.4 U	4 U	4.6 U
Styrene (Monomer)	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
Tetrachloroethene	ug/kg	1700	4.4 U	5.5 J	2.1 J	5.1 U	140 J	550 J	41	5.5 U	3.2 J	4 U	4.6 U
Toluene	ug/kg	4.8	2.5 J	6.5	8.6	2.4 J	74	400 D	32	8.3	16	4 U	3 J
trans-1,3-Dichloropropene	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
Trichloroethylene	ug/kg	31	4.4 U	3.3 J	6.6	5.1 U	28 J	87 J	5.8	5.5 U	5.3	4 U	4.6 U
Vinyl chloride	ug/kg	4.7 U	4.4 U	6.1 U	4.5 U	5.1 U	5 U	4.7 UJ	5.3 U	5.5 U	4.4 U	4 U	4.6 U
Xylenes, Total	ug/kg	4.1 J	8.8 U	6.2 J	4.1 J	10 U	13	28 J	66	4.2 J	8.9	8 U	9.2 U
SVOCs													
1,2,4-Trichlorobenzene	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 UJ	390 U	390 U	380 UJ
1,2-Dichlorobenzene	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
1,3-Dichlorobenzene	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
1,4-Dichlorobenzene	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	82 J	390 U	380 UJ
2,2'-Oxybis(1-Chloropropane)	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
2,4,5-Trichlorophenol	ug/kg	380 UJ	380 U	NR	410 UJ	380 U	400 U	390 U	400 U	NR	390 UJ	390 UJ	380 UJ
2,4,6-Trichlorophenol	ug/kg	380 UJ	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 UJ	390 UJ	390 UJ	380 UJ
2,4-Dichlorophenol	ug/kg	380 UJ	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 UJ	390 UJ	390 UJ	380 UJ
2,4-Dimethylphenol	ug/kg	380 UJ	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 UJ	390 UJ	380 UJ
2,4-Dinitrophenol	ug/kg	2000 UJ	2000 U	2500 UJ	2100 UJ	1900 U	2100 U	2000 U	2100 U	2100 UJ	2000 UJ	2000 UJ	1900 UJ
2,4-Dinitrotoluene	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
2,6-Dinitrotoluene	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
2-Chloronaphthalene	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
2-Chlorophenol	ug/kg	380 UJ	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 UJ	390 UJ	380 UJ
2-Methylnaphthalene	ug/kg	380 U	380 U	94 J	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
2-Methylphenol (o-Cresol)	ug/kg	380 UJ	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 UJ	390 UJ	380 UJ
2-Nitroaniline	ug/kg	2000 U	2000 U	2500 UJ	2100 UJ	1900 U	2100 U	2000 U	2100 U	2100 U	2000 U	2000 U	1900 UJ
2-Nitrophenol	ug/kg	380 UJ	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 UJ	390 UJ	380 UJ
3,3'-Dichlorobenzidine	ug/kg	760 U	770 U	960 UJ	810 UJ	760 U	800 U	770 U	800 U	820 U	780 U	770 U	760 UJ
3/4-Methylphenol (m&p-Cresol)	ug/kg	380 UJ	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 UJ	390 UJ	380 UJ
3-Nitroaniline	ug/kg	2000 U	2000 U	2500 UJ	2100 UJ	1900 U	2100 U	2000 U	2100 U	2100 U	2000 U	2000 U	1900 UJ
4,6-Dinitro-2-methylphenol	ug/kg	2000 U	2000 U	2500 UJ	2100 UJ	1900 U	2100 U	2000 U	2100 U	2100 U	2000 UJ	2000 UJ	1900 UJ
4-Bromophenyl Phenyl Ether	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
4-Chloro-3-methylphenol	ug/kg	380 UJ	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 UJ	390 UJ	380 UJ
4-Chloroaniline	ug/kg	760 U	770 U	960 UJ	810 UJ	760 U	800 U	770 U	800 U	820 U	330 J	770 U	760 UJ
4-Chlorophenyl Phenyl Ether	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
4-Nitroaniline	ug/kg	2000 U	2000 U	2500 UJ	2100 UJ	1900 U	2100 U	2000 U	2100 U	2100 U	2000 U	2000 U	1900 UJ
4-Nitrophenol	ug/kg	2000 UJ	2000 U	2500 UJ	2100 UJ	1900 U	2100 U	2000 U	2100 U	2100 U	2000 UJ	2000 UJ	1900 UJ
Acenaphthene	ug/kg	380 U	380 U	290 J	410 UJ	380 U	400 U	390 U	54 J	410 U	390 U	390 U	380 UJ
Acenaphthylene	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
Anthracene	ug/kg	380 U	38 J	920 J	41 J	380 U	400 U	390 U	370 J	410 U	390 U	390 U	380 UJ

NOTES:

U = Not detected at the MDL.

J = The concentration was detected at a value below the MDL.

UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.

D = Compound concentrations reported from a secondary dilution analysis.

B = Method blank contamination. The associate method blank contains the target analyte at a reportable level.

Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	Sample ID	SITE Q										
		AT-Q-33-SS	AT-Q-34-SS	AT-Q-35-SS	AT-Q-36-SS	SA-Q-9-SS	SA-Q-10-SS	SA-Q-10-SS-D	SA-Q-11-SS	SA-Q-12-SS	SA-Q-14-SS	SA-Q-15-SS	SA-Q-16-SS
	Sample Date	5/26/05	5/26/05	5/26/05	5/26/05	5/26/05	5/26/05	5/26/05	5/26/05	5/26/05	5/26/05	5/26/05	5/26/05
	Sample Depth	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft
	Percent Moisture	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SVOCs	**Units**												
Benzo(a)anthracene	ug/kg	380 U	160 J	2200 J	120 J	69 J	43 J	52 J	1500	61 J	66 J	63 J	380 UJ
Benzo(a)pyrene	ug/kg	380 U	140 J	2000 J	110 J	72 J	43 J	52 J	1100	65 J	79 J	120 J	23 J
Benzo(b)fluoranthene	ug/kg	380 U	170 J	1800 J	100 J	66 J	39 J	39 J	990	60 J	97 J	120 J	380 UJ
Benzo(g,h,i)perylene	ug/kg	380 U	120 J	1200 J	79 J	57 J	400 U	45 J	660	62 J	130 J	110 J	380 UJ
Benzo(k)fluoranthene	ug/kg	380 U	130 J	1600 J	110 J	79 J	49 J	57 J	1100	68 J	75 J	120 J	380 UJ
bis(2-Chloroethoxy)methane	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
bis(2-Chloroethyl)ether	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
bis(2-Ethylhexyl)phthalate	ug/kg	330 J	240 U	92 J	370 J	380 U	4800 D	1800	1100	120 J	1500	390 U	380 UJ
Butyl Benzyl Phthalate	ug/kg	380 U	380 U	150 J	100 J	380 U	400 U	390 U	170 J	410 U	380 J	390 U	380 UJ
Carbazole	ug/kg	380 U	380 U	520 J	410 UJ	380 U	400 U	390 U	63 J	410 U	390 U	390 U	380 UJ
Chrysene	ug/kg	380 U	190 J	2200 J	140 J	100 J	60 J	71 J	1500	72 J	100 J	79 J	380 UJ
Dibenzo(a,h)anthracene	ug/kg	380 U	380 U	440 J	410 UJ	380 U	400 U	390 U	400 U	410 U	61 J	74 J	380 UJ
Dibenzofuran	ug/kg	380 U	380 U	250 J	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
Diethyl Phthalate	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
Dimethyl Phthalate	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
Di-n-butylphthalate	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	100 J	410 U	59 J	390 U	380 UJ
Di-n-octylphthalate	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
Fluoranthene	ug/kg	43 J	350 J	4800 J	260 J	100 J	84 J	110 J	3400	95 J	140 J	81 J	34 J
Fluorene	ug/kg	380 U	380 U	340 J	410 UJ	380 U	400 U	390 U	51 J	410 U	390 U	390 U	380 UJ
Hexachlorobenzene	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	55 J	390 U	380 UJ
Hexachlorobutadiene	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 UJ	390 U	390 U	380 UJ
Hexachlorocyclopentadiene	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
Hexachloroethane	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
Indeno(1,2,3-cd)pyrene	ug/kg	380 U	110 J	1200 J	70 J	50 J	400 U	37 J	640	50 J	110 J	99 J	380 UJ
Isophorone	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	650	330 J	180 J	410 U	390 U	390 U	380 UJ
Naphthalene	ug/kg	380 U	28 J	190 J	410 UJ	380 U	400 U	390 U	400 U	410 U	93 J	390 U	380 UJ
Nitrobenzene	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
N-Nitroso-di-n-propylamine	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
N-Nitrosodiphenylamine	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
Pentachlorophenol	ug/kg	9.6 J	8.4 J	15	19	9.5 U	21	6.5 J	46	29	44	18	9.5 U
Phenanthrene	ug/kg	380 U	210 J	3800 J	190 J	39 J	400 U	46 J	1400	51 J	61 J	390 U	380 UJ
Phenol	ug/kg	380 UJ	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 UJ	390 UJ	380 UJ
Pyrene	ug/kg	40 J	310 J	3900 J	220 J	94 J	69 J	88 J	3300	110 J	130 J	81 J	34 J
Pesticides													
4,4'-DDD	ug/kg	18	NR	NR	7.4 J	3.8 U	4 U	7.8 U	40 U	16 U	39 UJ	19 UJ	1.2 J
4,4'-DDE	ug/kg	65	NR	NR	57	3.8 U	1.5 J	0.94 J	40 U	16 U	39 UJ	19 UJ	2.6 J
4,4'-DDT	ug/kg	280 D	NR	NR	68	3.8 U	46	26	500	19	780 J	190 J	4.8
Aldrin	ug/kg	2 U	NR	NR	8.4 U	1.9 U	4.3	0.7 J	21 U	8.4 U	20 UJ	10 UJ	1.9 U
alpha-BHC	ug/kg	2 U	NR	NR	8.4 U	1.9 U	2.1 U	4 U	21 U	8.4 U	20 UJ	10 UJ	1.9 U
alpha-Chlordane	ug/kg	2 U	NR	NR	8.4 U	1.9 U	2.9 J	1.5 J	21 U	2.3 J	20 UJ	10 UJ	1.9 U
beta-BHC	ug/kg	2 U	NR	NR	8.4 U	1.9 U	2.1 U	4 U	21 U	8.4 U	20 UJ	10 UJ	1.9 U
delta-BHC	ug/kg	2 U	NR	NR	8.4 U	1.9 U	2.1 U	4 U	21 U	8.4 U	20 UJ	10 UJ	1.9 U
Dieldrin	ug/kg	15	NR	NR	16 U	3.8 U	30	14	40 U	18	39 UJ	19 UJ	4.9
Endosulfan I	ug/kg	2 U	NR	NR	8.4 U	1.9 U	2.1 U	4 U	21 U	8.4 U	20 UJ	10 UJ	1.9 U
Endosulfan II	ug/kg	3.8 U	NR	NR	16 U	3.8 U	4 U	7.8 U	40 U	16 U	39 UJ	19 UJ	3.8 U
Endosulfan Sulfate	ug/kg	3.8 U	NR	NR	16 U	3.8 U	4 U	7.8 U	40 U	16 U	39 UJ	19 UJ	3.8 U
Endrin	ug/kg	3.8 U	NR	NR	16 U	3.8 U	4 U	7.8 U	40 U	16 U	39 UJ	19 UJ	3.8 U
Endrin Aldehyde	ug/kg	3.8 U	NR	NR	16 U	3.8 U	4 U	7.8 U	40 U	16 U	39 UJ	19 UJ	3.8 U
Endrin Ketone	ug/kg	3.8 UJ	NR	NR	16 U	3.8 U	4 U	7.8 U	40 U	16 U	39 UJ	19 UJ	3.8 U
gamma-BHC (Lindane)	ug/kg	2 U	NR	NR	8.4 U	1.9 U	2.1 U	4 U	21 U	8.4 U	7.4 J	10 UJ	1.9 U
gamma-Chlordane	ug/kg	2 U	NR	NR	8.4 U	1.9 U	3.9 J	1.5 J	21 U	8.4 U	20 UJ	10 UJ	1.9 U
Heptachlor	ug/kg	2 U	NR	NR	8.4 U	1.9 U	2.1 U	4 U	21 U	8.4 U	20 UJ	10 UJ	1.9 U
Heptachlor Epoxide	ug/kg	2 U	NR	NR	8.4 U	1.9 U	2.2 J	0.87 J	17 J	8.4 U	50 J	13 J	1.9 U
Methoxychlor	ug/kg	20 U	NR	NR	84 U	19 U	21 U	40 U	210 U	84 U	200 UJ	100 UJ	19 U
Toxaphene	ug/kg	200 U	NR	NR	840 U	190 U	210 U	400 U	2100 U	840 U	2000 UJ	1000 UJ	190 U
Herbicides													
2,4-D	ug/kg	20	9.6 U	12 U	10 U	9.5 U	10 U	9.7 U	10 U	10 U	9.9 U	9.7 U	9.5 U
2,4-DB	ug/kg	9.6 U	9.6 U	12 U	10 U	9.5 U	10 U	9.7 U	10 U	10 U	9.9 U	9.7 U	9.5 U
2,4,5-T	ug/kg	8.9 J	9.6 U	12 U	10 U	9.5 U	10 U	9.7 U	10 U	10 U	7.4 J	9.7 U	9.5 U
2,4,5-TP (Silvex)	ug/kg	9.6 U	2.3 J	12 U	10 U	9.5 U	10 U	9.7 U	10 U	10 U	9.9 U	9.7 U	9.5 U
Dalapon	ug/kg	380 U	380 U	480 U	410 U	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 U
Dicamba	ug/kg	9.6 U	2 J	12 U	10 U	9.5 U	10 U	9.7 U	10 U	10 U	9.9 U	9.7 U	9.5 U
Dichlorprop	ug/kg	5 J	25 J	150 U	120 U	110 U	120 U	120 U	120 U	120 U	120 U	6.2 J	110 U
Dinoseb	ug/kg	380 U	380 U	480 UJ	410 UJ	380 U	400 U	390 U	400 U	410 U	390 U	390 U	380 UJ
MCPA	ug/kg	2300 U	2300 U	2900 U	2500 U	2300 U	2400 U	2300 U	2400 U	2500 U	2400 U	2300 U	2300 U
MCPP	ug/kg	2700	5300	2900 U	4800	2300 U	2400 U	2300 U	2400 U	3700 J	2400 U	2300 U	15000

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Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	Sample ID	SITE Q												
	Sample Date	AT-Q-33-SS 5/26/05	AT-Q-34-SS 5/26/05	AT-Q-35-SS 5/26/05	AT-Q-36-SS 5/26/05	SA-Q-9-SS 5/26/05	SA-Q-10-SS 5/26/05	SA-Q-10-SS-D 5/26/05	SA-Q-11-SS 5/26/05	SA-Q-12-SS 5/26/05	SA-Q-14-SS 5/26/05	SA-Q-15-SS 5/26/05	SA-Q-16-SS 5/26/05
	Sample Depth	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft
	Percent Moisture	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
PCBs	**Units**												
Decachlorobiphenyl	ug/kg	200 UJ	NR	NR	2.7 J	97 UJ	100 UJ	100 UJ	5.8 J	1100 U	200 U	200 U	19 UJ
Dichlorobiphenyl	ug/kg	140 J	NR	NR	2.7 J	19 UJ	20 UJ	19 UJ	8 UJ	200 U	25 J	39 U	3.8 UJ
Heptachlorobiphenyl	ug/kg	130 J	NR	NR	37 J	57 UJ	39 J	59 UJ	190 J	620 U	230	23 J	7 J
Hexachlorobiphenyl	ug/kg	310 J	NR	NR	190 J	38 UJ	42 J	12 J	380 J	420 U	740	220	12 J
Monochlorobiphenyl	ug/kg	38 UJ	NR	NR	4.1 UJ	19 UJ	20 UJ	19 UJ	8 UJ	200 U	39 U	39 U	3.8 UJ
Nonachlorobiphenyl	ug/kg	200 UJ	NR	NR	21 UJ	97 UJ	100 UJ	100 UJ	8.8 J	1100 U	200 U	200 U	19 UJ
Octachlorobiphenyl	ug/kg	120 UJ	NR	NR	5.2 J	57 UJ	60 UJ	59 UJ	36 J	620 U	53 J	120 U	11 UJ
Pentachlorobiphenyl	ug/kg	120 J	NR	NR	310 J	38 UJ	39 J	39 UJ	240 J	420 U	1400	850	7.7 UJ
Tetrachlorobiphenyl	ug/kg	99 J	NR	NR	190 J	38 UJ	40 UJ	39 UJ	140 J	420 U	2300	1100	7.7 UJ
Trichlorobiphenyl	ug/kg	57 J	NR	NR	9.7 J	19 UJ	20 UJ	19 UJ	6.6 J	200 U	730	59	3.8 UJ
Total PCBs	ug/kg	856	NR	NR	747	97 UJ	120	12	1007	1100 U	5478	2252	19
Dioxins/Furans													
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.41 U	NR	NR	1.8	0.39 U	13	7.6	3.7	26 D	4.4	3.1	0.7 U
1,2,3,4,6,7,8-HpCDF	ug/kg	0.13 U	NR	NR	0.69 U	0.15 U	3.2	1.6	1.2 J	1.5	1.4 J	0.65 U	0.32 U
1,2,3,4,7,8,9-HpCDF	ug/kg	0.069 U	NR	NR	0.24 U	0.096 U	0.25 U	0.17 U	0.14 U	0.22 U	0.21 U	0.22 U	0.11 U
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	0.11 U	NR	NR	0.14 U	0.087 U	0.5 U	0.38 U	0.36 U	0.55 U	0.16 U	0.23 U	0.089 U
1,2,3,4,7,8-HxCDF	ug/kg	0.051 U	NR	NR	0.04 U	0.051 U	1.1 J	0.37 U	0.51 U	0.17 U	0.51 U	0.21 U	0.076 U
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	0.091 U	NR	NR	0.12 U	0.079 U	0.62 U	0.45 U	0.3 U	0.6 U	0.23 U	0.2 U	0.076 U
1,2,3,6,7,8-HxCDF	ug/kg	0.048 U	NR	NR	0.28 U	0.042 U	0.58 U	0.3 U	0.086 U	0.15 U	0.2 U	0.047 U	0.063 U
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	ug/kg	0.091 U	NR	NR	0.12 U	0.078 U	0.81 J	0.69 U	0.2 U	0.28 U	0.13 U	0.19 U	0.074 U
1,2,3,7,8,9-HxCDF	ug/kg	0.034 U	NR	NR	0.053 U	0.035 U	0.23 U	0.18 U	0.07 U	0.057 U	0.17 U	0.21 U	0.061 U
1,2,3,7,8-Pentachlorodibenzofuran	ug/kg	0.057 U	NR	NR	0.13 U	0.036 U	0.3 U	0.22 U	0.14 U	0.054 U	0.13 U	0.058 U	0.033 U
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	ug/kg	0.099 U	NR	NR	0.093 U	0.088 U	0.28 U	0.21 U	0.11 U	0.095 U	0.23 U	0.085 U	0.06 U
2,3,4,6,7,8-HxCDF	ug/kg	0.043 U	NR	NR	0.4 U	0.035 U	0.72 U	0.42 U	0.16 U	0.32 U	0.32 U	0.11 U	0.32 U
2,3,4,7,8-PeCDF	ug/kg	0.056 U	NR	NR	0.082 U	0.047 U	0.52 U	0.37 U	0.087 U	0.065 U	0.24 U	0.1 U	0.054 U
2,3,7,8-TCDD	ug/kg	0.067 U	NR	NR	0.074 U	0.064 U	0.21 U	0.22 U	0.19 U	0.16 U	0.18 U	0.034 U	0.04 U
2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.083 U	NR	NR	0.24 U	0.051 U	1.5	1.1	0.47 J	0.085 U	0.69	0.22 U	0.042 U
OCDD	ug/kg	5.7	NR	NR	23	7.3	82 J	39	47	310 D	41	45	14
OCDF	ug/kg	0.53 U	NR	NR	1.8 U	0.6 U	4.7	2 J	3.1	5.8	2.6 J	3.6	1.3 U
Total HpCDD	ug/kg	0.41 U	NR	NR	3.4	0.47 U	26	14	6.5	50	8.3	6.1	0.73
Total HpCDF	ug/kg	0.57 U	NR	NR	1.1 U	0.33 U	6.1	2.9	3.2	8	3.6	1.8	0.65 U
Total HxCDD	ug/kg	0.11 U	NR	NR	0.14 U	0.087 U	6.7	4.1	0.6 U	2.9	2	0.23 U	0.089 U
Total HxCDF	ug/kg	0.22 U	NR	NR	0.34 U	0.26 U	2.7	2	0.51 U	1.4	0.7 U	0.39 U	0.54 U
Total PeCDD	ug/kg	0.14 U	NR	NR	0.14 U	0.14 U	0.42 U	0.21 U	0.11 U	0.15 U	0.23 U	0.085 U	0.1 U
Total PeCDF	ug/kg	0.09 U	NR	NR	0.25 U	0.053 U	3.1	1	0.48 U	0.14 U	0.67 U	0.18 U	0.056 U
Total TCDD	ug/kg	0.067 U	NR	NR	0.074 U	0.064 U	1.1	1.1	0.35	0.16 U	0.93	0.034 U	0.04 U
Total TCDF	ug/kg	0.12 U	NR	NR	0.25 U	0.076 U	6.5	2.7	0.86	0.096 U	1.8	0.23 U	0.091 U
Metals													
Aluminum	mg/kg	5000	8000	8300	8600	11000	12000	9900	8600	10000	12000	11000	7900
Antimony	mg/kg	1.4 J	0.58 J	1.4 J	1.2 J	0.52 J	2.6	1.5 J	2.4	2.3 UJ	2.8	0.85 J	2.1 U
Arsenic	mg/kg	13	6.5	8.3	6.4	6.3	7.9	5.8	8.5	4.8	8.5	6.1	4.2
Barium	mg/kg	170	170	1300	650	150	580 J	300 J	780	460 J	790	330	160
Beryllium	mg/kg	0.43 J	0.72	0.64	0.64	0.85	0.84	0.58	0.57	0.65	0.9	0.58	0.5
Cadmium	mg/kg	8000	2.7	2.6	4.9	1.4	7.1	4.4	16	2.1	11	2.1	0.78
Calcium	mg/kg	10000	8400	52000	12000	6400	18000	18000	14000	15000	9900	14000	7100
Chromium	mg/kg	9.9	15	70	31	19	48 J	28 J	110	22	60	32	13
Cobalt	mg/kg	5.4	7.2	6.8	11	8	8.2	7.1	15	7.2	13	7.4	5.8
Copper	mg/kg	460	38	160	160	36	810 J	230 J	430	66 J	310	100	30
Iron	mg/kg	9700	13000	20000	17000	18000	38000 J	21000 J	25000	17000	26000	19000	13000
Lead	mg/kg	180	56	320	390	38	820 J	360 J	1100	120 J	500	150	31
Magnesium	mg/kg	3300	3700	5800	5100	3700	3600	4100	4200	4600	5600	4400	3800
Manganese	mg/kg	360	440	450	360	500	540	370	450	430	890	510	380
Mercury	mg/kg	0.25	0.072 J	140	0.66	NR	0.41	0.24	0.98	0.7	0.61	0.98	0.17
Nickel	mg/kg	17	19	27	30	20	33	24	47	21	72	28	15
Potassium	mg/kg	990	1300	1400	1400	1600	1400	1400	1500	1500 J	1500	1400	1200
Selenium	mg/kg	2.8 U	2.7 U	3.5 U	2.8 U	2.7 U	2.8 U	2.8 U	1.4 J	2.8 U	1.8 J	2.8 U	2.7 U
Silver	mg/kg	0.34 J	0.15 J	0.54 J	0.84 J	0.15 J	4.6	2.1	3.7	0.38 J	1.8	0.54 J	1.1 U
Sodium	mg/kg	870	170	300	190	150 U	420	220 U	310	150	290	170	110
Thallium	mg/kg	3.3	2.7 U	3.5 U	2.8 U	2.7 U	2.8 U	2.8 U	2.9 U	2.8 U	2.8 U	2.8 U	2.7 U
Vanadium	mg/kg	16	24	24	25	30	25	25	25	26	29	25	21
Zinc	mg/kg	12000	290	820	620	240	1400 J	820 J	1300	320	1200	390	100

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Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	Sample ID	SITE R				SITE S	
		SOIL-R-1	SOIL-R-2	SOIL-R-3	SOIL-R-4	SOIL-S-1	SA-S-1-SS
	Sample Date	07/11/02	07/11/02	07/12/02	07/12/02	07/10/02	5/26/05
	Sample Depth	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft
	Percent Moisture	7.2	5.7	5.3	10.3	6.9	NR
VOCs	**Units**						
1,1,1-Trichloroethane	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	6.6
1,1,2,2-Tetrachloroethane	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
1,1,2-Trichloroethane	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
1,1-Dichloroethane	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	5.6
1,1-Dichloroethylene	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
1,2-Dichloroethane	ug/kg	7.1 U	5.5 U	2.6 J	1.5 J	5.4 U	4.5 U
1,2-Dichloroethene (total)	ug/kg	14 U	11 U	0.94 J	11 U	11 U	9 U
1,2-Dichloropropane	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
2-Butanone (MEK)	ug/kg	15 J	3.1 J	16 J	15 J	27 U	26
2-Hexanone	ug/kg	35 U	28 U	33 U	27 U	27 U	22 U
4-Methyl-2-pentanone (MIBK)	ug/kg	35 U	28 U	10 J	27 U	27 U	22 U
Acetone	ug/kg	130	11 J	150	98	14 J	170
Benzene	ug/kg	0.68 J	2.1 J	1.4 J	1.6 J	5.4 U	1.5 J
Bromodichloromethane	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
Bromoform	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
Bromomethane	ug/kg	14 U	11 U	13 U	11 U	11 U	4.5 U
Carbon Disulfide	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.8
Carbon Tetrachloride	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
Chlorobenzene	ug/kg	7.1 U	64	2.6 J	1.8 J	5.4 U	4.5 U
Chloroethane	ug/kg	14 U	11 U	13 U	11 U	11 U	4.5 U
Chloroform	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
Chloromethane	ug/kg	14 U	11 U	13 U	11 U	11 U	4.5 U
cis-1,3-Dichloropropene	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
Dibromochloromethane	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
Ethylbenzene	ug/kg	0.24 J	1.9 J	0.38 J	0.31 J	5.4 U	1.1 J
Methylene Chloride	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
Styrene (Monomer)	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
Tetrachloroethene	ug/kg	7.1 U	12	2.6 J	10	5.4 U	3 J
Toluene	ug/kg	7.1 U	5.5 U	6.6 U	1.8 J	5.4 U	6.2
trans-1,3-Dichloropropene	ug/kg	7.1 U	5.5 U	6.6 U	5.3 U	5.4 U	4.5 U
Trichloroethylene	ug/kg	7.1 U	0.3 J	12	19	5.4 U	1.9 J
Vinyl chloride	ug/kg	14 U	11 U	13 U	11 U	11 U	4.5 U
Xylenes, Total	ug/kg	14 U	9.1 J	1.3 J	0.95 J	11 U	4.4 J
SVOCs							
1,2,4-Trichlorobenzene	ug/kg	350 U	350 U	370 U	360 U	36000	460 UJ
1,2-Dichlorobenzene	ug/kg	350 U	350 U	370 U	360 U	37000	460 UJ
1,3-Dichlorobenzene	ug/kg	350 U	350 U	370 U	360 U	1000 J	460 UJ
1,4-Dichlorobenzene	ug/kg	350 U	350 U	370 U	360 U	7500 J	460 UJ
2,2'-Oxybis(1-Chloropropane)	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
2,4,5-Trichlorophenol	ug/kg	350 U	350 U	370 U	360 U	1100 J	460 UJ
2,4,6-Trichlorophenol	ug/kg	350 U	350 U	370 U	360 U	8200 J	460 UJ
2,4-Dichlorophenol	ug/kg	350 U	350 U	370 U	360 U	2300 J	460 UJ
2,4-Dimethylphenol	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
2,4-Dinitrophenol	ug/kg	1800 U	1800 U	1900 U	1800 U	74000 U	2400 UJ
2,4-Dinitrotoluene	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
2,6-Dinitrotoluene	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
2-Chloronaphthalene	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
2-Chlorophenol	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
2-Methylnaphthalene	ug/kg	350 U	350 U	370 U	360 U	11000 J	460 UJ
2-Methylphenol (o-Cresol)	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
2-Nitroaniline	ug/kg	1800 U	1800 U	1900 U	1800 U	4600 J	2400 UJ
2-Nitrophenol	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
3,3'-Dichlorobenzidine	ug/kg	710 U	700 U	740 U	720 U	29000 U	920 UJ
3/4-Methylphenol (m&p-Cresol)	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
3-Nitroaniline	ug/kg	1800 U	1800 U	1900 U	1800 U	74000 U	2400 UJ
4,6-Dinitro-2-methylphenol	ug/kg	1800 U	1800 U	1900 U	1800 U	74000 U	2400 UJ
4-Bromophenyl Phenyl Ether	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
4-Chloro-3-methylphenol	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
4-Chloroaniline	ug/kg	710 U	700 U	740 U	720 U	29000 U	920 UJ
4-Chlorophenyl Phenyl Ether	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
4-Nitroaniline	ug/kg	1800 U	1800 U	1900 U	1800 U	57000 J	2400 UJ
4-Nitrophenol	ug/kg	1800 U	1800 U	1900 U	1800 U	74000 U	2400 UJ
Acenaphthene	ug/kg	350 U	350 U	370 U	360 U	1200 J	460 UJ
Acenaphthylene	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Anthracene	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ

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R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.

Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	Sample ID	SITE R				SITE S	
	Sample ID	SOIL-R-1	SOIL-R-2	SOIL-R-3	SOIL-R-4	SOIL-S-1	SA-S-1-SS
	Sample Date	07/11/02	07/11/02	07/12/02	07/12/02	07/10/02	5/26/05
	Sample Depth	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft	0.5 Ft
	Percent Moisture	7.2	5.7	5.3	10.3	6.9	NR
SVOCs	**Units**						
Benzo(a)anthracene	ug/kg	30 J	350 U	370 U	33 J	8000 J	460 UJ
Benzo(a)pyrene	ug/kg	26 J	350 U	370 U	33 J	5400 J	460 UJ
Benzo(b)fluoranthene	ug/kg	30 J	350 U	370 U	32 J	6600 J	460 UJ
Benzo(g,h,i)perylene	ug/kg	45 J	350 U	370 U	25 J	4200 J	460 UJ
Benzo(k)fluoranthene	ug/kg	26 J	350 U	370 U	35 J	6400 J	460 UJ
bis(2-Chloroethoxy)methane	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
bis(2-Chloroethyl)ether	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
bis(2-Ethylhexyl)phthalate	ug/kg	78 J	350 U	370 U	360 U	3900 J	540 J
Butyl Benzyl Phthalate	ug/kg	350 U	350 U	370 U	360 U	120000	460 UJ
Carbazole	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Chrysene	ug/kg	32 J	350 U	20 J	51 J	20000	460 UJ
Dibenzo(a,h)anthracene	ug/kg	350 U	350 U	370 U	360 U	1800 J	460 UJ
Dibenzofuran	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Diethyl Phthalate	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Dimethyl Phthalate	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Di-n-butylphthalate	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Di-n-octylphthalate	ug/kg	350 U	350 U	370 U	360 U	1300 J	460 UJ
Fluoranthene	ug/kg	350 U	350 U	370 U	39 J	4200 J	460 UJ
Fluorene	ug/kg	350 U	350 U	370 U	360 U	1200 J	460 UJ
Hexachlorobenzene	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Hexachlorobutadiene	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Hexachlorocyclopentadiene	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Hexachloroethane	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Indeno(1,2,3-cd)pyrene	ug/kg	43 J	350 U	370 U	360 U	1300 J	460 UJ
Isophorone	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Naphthalene	ug/kg	350 U	350 U	370 U	360 U	2100 J	460 UJ
Nitrobenzene	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
N-Nitroso-di-n-propylamine	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
N-Nitrosodiphenylamine	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Pentachlorophenol	ug/kg	92 U	90 U	76 U	26 U	440000	18 J
Phenanthrene	ug/kg	21 J	350 U	370 U	30 J	9200 J	460 UJ
Phenol	ug/kg	350 U	350 U	370 U	360 U	14000 U	460 UJ
Pyrene	ug/kg	350 U	350 U	370 U	48 J	28000	460 UJ
Pesticides							
4,4'-DDD	ug/kg	7.1 UJ	3.5 U	3.7 U	3.6 U	1700 J	NR
4,4'-DDE	ug/kg	7.1 UJ	3.5 U	3.7 U	3.6 U	3300 J	NR
4,4'-DDT	ug/kg	2.7 J	3.5 U	3.7 UJ	3.6 UJ	16000 J	NR
Aldrin	ug/kg	3.6 UJ	1.8 U	1.9 U	1.8 U	1800 U	NR
alpha-BHC	ug/kg	3.6 UJ	1.8 U	1.9 U	1.8 U	1800 U	NR
alpha-Chlordane	ug/kg	3.6 UJ	1.8 U	1.9 U	1.8 U	1800 U	NR
beta-BHC	ug/kg	3.6 UJ	1.8 U	1.9 U	1.8 U	26000 J	NR
delta-BHC	ug/kg	3.6 UJ	1.8 U	1.9 U	1.8 U	740 J	NR
Dieldrin	ug/kg	1.4 J	3.5 U	0.37 J	1 J	3600 U	NR
Endosulfan I	ug/kg	3.6 UJ	1.8 U	1.9 U	1.8 U	1800 U	NR
Endosulfan II	ug/kg	7.1 UJ	3.5 U	3.7 U	3.6 U	5400	NR
Endosulfan Sulfate	ug/kg	7.1 UJ	3.5 U	3.7 U	3.6 U	3600 U	NR
Endrin	ug/kg	7.1 UJ	3.5 U	3.7 UJ	3.6 UJ	10000	NR
Endrin Aldehyde	ug/kg	7.1 UJ	3.5 U	3.7 U	3.6 U	3600 U	NR
Endrin Ketone	ug/kg	7.1 UJ	3.5 U	3.7 UJ	3.6 UJ	3600 U	NR
gamma-BHC (Lindane)	ug/kg	3.6 UJ	1.8 U	1.9 U	1.8 U	7500 J	NR
gamma-Chlordane	ug/kg	3.6 UJ	1.8 U	1.9 U	0.23 J	2700 J	NR
Heptachlor	ug/kg	3.6 UJ	1.8 U	1.9 U	1.8 U	1500 J	NR
Heptachlor Epoxide	ug/kg	3.6 UJ	1.8 U	1.9 U	1.8 U	1800 U	NR
Methoxychlor	ug/kg	36 UJ	18 U	19 UJ	18 UJ	18000 U	NR
Toxaphene	ug/kg	360 UJ	180 U	190 U	180 U	180000 U	NR
Herbicides							
2,4-D	ug/kg	45 U	55 J	37 U	18 U	3300 J	12 U
2,4-DB	ug/kg	45 U	29 J	26 J	60 J	180 U	12 U
2,4,5-T	ug/kg	45 U	44 U	37 U	9 U	36000 U	12 U
2,4,5-TP (Silvex)	ug/kg	45 U	44 U	37 U	9.3 J	250 J	12 U
Dalapon	ug/kg	11000 U	11000 U	9000 U	2200 U	43000 U	460 U
Dicamba	ug/kg	110 U	110 U	90 U	22 U	430 U	2.2 J
Dichlorprop	ug/kg	100 J	91 J	75 J	44 J	2200 U	140 U
Dinoseb	ug/kg	350 U	350 U	370 U	360 U	1700 J	460 UJ
MCPA	ug/kg	11000 U	11000 U	9000 U	2200 U	43000 U	2800 U
MCPP	ug/kg	49000 J	43000 J	51000 J	5200 J	43000 U	8400 J

NOTES:
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UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.

Table III-A1
Surface Soil Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth Percent Moisture	SITE R SOIL-R-1 07/11/02 0.5 Ft 7.2	 SOIL-R-2 07/11/02 0.5 Ft 5.7	 SOIL-R-3 07/12/02 0.5 Ft 5.3	 SOIL-R-4 07/12/02 0.5 Ft 10.3	SITE S SOIL-S-1 07/10/02 0.5 Ft 6.9	 SA-S-1-SS 5/26/05 0.5 Ft NR
PCBs							
Decachlorobiphenyl	ug/kg	18 U	18 U	19 U	18 U	9200 U	NR
Dichlorobiphenyl	ug/kg	3.5 U	3.5 U	3.7 U	3.6 U	100000	NR
Heptachlorobiphenyl	ug/kg	11 U	11 U	11 U	11 U	14000	NR
Hexachlorobiphenyl	ug/kg	7.2 U	7.1 U	7.5 U	3.2 J	34000	NR
Monochlorobiphenyl	ug/kg	3.5 U	3.5 U	3.7 U	3.6 U	87000	NR
Nonachlorobiphenyl	ug/kg	18 U	18 U	19 U	18 U	2300 J	NR
Octachlorobiphenyl	ug/kg	11 U	11 U	11 U	11 U	1200 J	NR
Pentachlorobiphenyl	ug/kg	7.2 U	7.1 U	7.5 U	2.5 J	130000	NR
Tetrachlorobiphenyl	ug/kg	7.2 U	7.1 U	7.5 U	7.3 U	370000	NR
Trichlorobiphenyl	ug/kg	3.5 U	3.5 U	3.7 U	0.92 J	270000	NR
Total PCBs	ug/kg	18 U	18 U	19 U	6.6	1008500	NR
Dioxins/Furans							
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	0.16 U	0.3 U	0.15 U	0.049 U	0.2 J	NR
1,2,3,4,6,7,8-HpCDF	ug/kg	0.046 U	0.22 U	0.24 U	0.35 U	0.03 U	NR
1,2,3,4,7,8,9-HpCDF	ug/kg	0.023 U	0.36 U	0.29 U	0.18 U	0.011 U	NR
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	0.021 U	0.25 U	0.14 U	0.028 U	0.0052 U	NR
1,2,3,4,7,8-HxCDF	ug/kg	0.02 U	0.11 U	0.12 U	0.075 U	0.003 U	NR
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	0.024 U	0.27 U	0.15 U	0.073 U	0.016 U	NR
1,2,3,6,7,8-HxCDF	ug/kg	0.015 U	0.15 U	0.12 U	0.053 U	0.018 U	NR
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	ug/kg	0.024 U	0.22 U	0.13 U	0.078 U	0.0077 U	NR
1,2,3,7,8,9-HxCDF	ug/kg	0.018 U	0.11 U	0.17 U	0.11 U	0.0058 U	NR
1,2,3,7,8-Pentachlorodibenzofuran	ug/kg	0.0095 U	0.11 U	0.04 U	0.032 U	0.0026 U	NR
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	ug/kg	0.031 U	0.17 U	0.054 U	0.2 U	0.0061 U	NR
2,3,4,6,7,8-HxCDF	ug/kg	0.021 U	0.16 U	0.18 U	0.067 U	0.0037 U	NR
2,3,4,7,8-PeCDF	ug/kg	0.0096 U	0.15 U	0.032 U	0.054 U	0.0037 U	NR
2,3,7,8-TCDD	ug/kg	0.018 U	0.11 U	0.037 U	0.021 U	0.0032 U	NR
2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.0098 U	0.12 U	0.026 U	0.019 U	0.012 U	NR
OCDD	ug/kg	8.1 U	0.97 U	0.96 UJ	2.9 U	9	NR
OCDF	ug/kg	0.12 U	0.51 U	0.65 UJ	0.46 U	0.14 U	NR
Total HpCDD	ug/kg	0.16 U	0.34 U	0.61 U	0.049 U	0.4	NR
Total HpCDF	ug/kg	0.069 U	0.39 U	0.4 U	0.35 U	0.096 U	NR
Total HxCDD	ug/kg	0.032 U	0.32 U	0.15 U	0.078 U	0.018 U	NR
Total HxCDF	ug/kg	0.021 U	0.16 U	0.18 U	0.13 U	0.018 U	NR
Total PeCDD	ug/kg	0.13 U	0.41 U	0.31 U	0.2 U	0.059 U	NR
Total PeCDF	ug/kg	0.019 U	0.15 U	0.04 U	0.071 U	0.0091 U	NR
Total TCDD	ug/kg	0.018 U	0.11 U	0.037 U	0.021 U	0.0032 U	NR
Total TCDF	ug/kg	0.015 U	0.19 U	0.042 U	0.063 U	0.012 U	NR
Metals							
Aluminum	mg/kg	8700 J	7600 J	10000 J	8700 J	7300 J	9400
Antimony	mg/kg	0.44 J	1.9 UJ	2.2 UJ	2 UJ	0.58 J	2.4 U
Arsenic	mg/kg	7.2	5.5	6.6	6.1	5.8	6.6
Barium	mg/kg	150 J	110 J	120 J	120 J	120 J	110
Beryllium	mg/kg	0.68	0.48	0.6	0.49	0.46	0.48
Cadmium	mg/kg	0.49 J	0.76 J	0.56 U	0.49 U	0.85 J	0.76
Calcium	mg/kg	4400	6400	6100	5500	4900	7900
Chromium	mg/kg	17	13	17	14	23	17
Cobalt	mg/kg	15 J	6.9 J	8.3	6.8	9.4 J	7.3
Copper	mg/kg	23	25	15	15	23	20
Iron	mg/kg	18000	15000	18000	16000	13000	15000
Lead	mg/kg	33 J	19 J	10 J	8.6 J	63 J	26
Magnesium	mg/kg	3400 J	4600 J	4800 J	4500 J	2600 J	4800
Manganese	mg/kg	1200	560	690	550	670	540
Mercury	mg/kg	0.037	0.076	0.06	0.063	0.074	0.063
Nickel	mg/kg	20	17	21	18	20	16
Potassium	mg/kg	880 J	820 J	1000 J	790 J	870 J	1100
Selenium	mg/kg	0.98 U	0.97 U	1.1 U	0.99 U	0.99 U	3 U
Silver	mg/kg	0.98 U	0.97 U	1.1 U	0.99 U	0.99 U	1.2 U
Sodium	mg/kg	90 J	87 J	120 J	110 J	79 J	120
Thallium	mg/kg	0.98 U	0.97 U	1.1 UJ	0.99 UJ	0.99 U	3 U
Vanadium	mg/kg	34 J	27 J	30 J	29 J	24 J	27
Zinc	mg/kg	91 J	120 J	47 J	43 J	110 J	77

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Table III-A2
Large Pond Surface Water Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth	Large Pond Surface Water								
		P11W 11/18/02 Surface	P11W-Filtered 11/18/02 Surface	P12W[a] 11/18/02 Surface	LPond-1-W (Total) 06/19/03 Surface	LPond-1-W (Dissolved) 06/19/03 Surface	LPond-2-W (Total) 06/25/03 Surface	LPond-2-W (Dissolved) 06/25/03 Surface	LPond-3-W (Total) 06/19/03 Surface	LPond-3-W (Dissolved) 06/19/03 Surface
VOCs	**Units**									
1,1,1-Trichloroethane	ug/L	1 UJ	NR	1 UJ	1 U	NR	1 U	NR	1 U	NR
1,1,2,2-Tetrachloroethane	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
1,1,2-Trichloroethane	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
1,1-Dichloroethane	ug/L	1 U	NR	1 U	0.21 J	NR	1 U	NR	1 U	NR
1,1-Dichloroethylene	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
1,2-Dichloroethane	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
1,2-Dichloroethene (total)	ug/L	2 U	NR	2 U	2 U	NR	2 U	NR	2 U	NR
1,2-Dichloropropane	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
2-Butanone (MEK)	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2-Hexanone	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
4-Methyl-2-pentanone (MIBK)	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Acetone	ug/L	25 U	NR	25 U	25 U	NR	25 U	NR	25 U	NR
Benzene	ug/L	1 U	NR	1 U	0.12 J	NR	1 U	NR	1 U	NR
Bromodichloromethane	ug/L	1 UJ	NR	1 UJ	1 U	NR	1 U	NR	1 U	NR
Bromoform	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
Bromomethane	ug/L	1 U	NR	1 U	1 UJ	NR	1 UJ	NR	1 UJ	NR
Carbon Disulfide	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
Carbon Tetrachloride	ug/L	1 UJ	NR	1 UJ	1 U	NR	1 U	NR	1 U	NR
Chlorobenzene	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
Chloroethane	ug/L	1 UJ	NR	1 UJ	1 U	NR	1 U	NR	1 U	NR
Chloroform	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
Chloromethane	ug/L	1 UJ	NR	1 UJ	1 U	NR	1 U	NR	1 U	NR
cis-1,3-Dichloropropene	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
Dibromochloromethane	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
Ethylbenzene	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	0.14 J	NR
Methylene Chloride	ug/L	5 U	NR	5 U	5 U	NR	5 U	NR	5 U	NR
Styrene (Monomer)	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
Tetrachloroethene	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
Toluene	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
trans-1,3-Dichloropropene	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
Trichloroethylene	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
Vinyl chloride	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
Xylenes, Total	ug/L	2 U	NR	2 U	2 UJ	NR	2 UJ	NR	2 UJ	NR
SVOCs										
1,2,4-Trichlorobenzene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
1,2-Dichlorobenzene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
1,3-Dichlorobenzene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
1,4-Dichlorobenzene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2,2'-Oxybis(1-Chloropropane)	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2,4,5-Trichlorophenol	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2,4,6-Trichlorophenol	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2,4-Dichlorophenol	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2,4-Dimethylphenol	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2,4-Dinitrophenol	ug/L	50 UJ	NR	50 UJ	50 U	NR	50 U	NR	50 U	NR
2,4-Dinitrotoluene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2,6-Dinitrotoluene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2-Chloronaphthalene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2-Chlorophenol	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2-Methylnaphthalene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2-Methylphenol (o-Cresol)	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
2-Nitroaniline	ug/L	50 UJ	NR	50 UJ	50 U	NR	50 U	NR	50 U	NR
2-Nitrophenol	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
3,3'-Dichlorobenzidine	ug/L	20 U	NR	20 U	20 U	NR	20 U	NR	20 U	NR
3/4-Methylphenol (m&p-Cresol)	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
3-Nitroaniline	ug/L	50 UJ	NR	50 UJ	50 U	NR	50 U	NR	50 U	NR
4,6-Dinitro-2-methylphenol	ug/L	50 U	NR	50 U	50 U	NR	50 U	NR	50 U	NR
4-Bromophenyl Phenyl Ether	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
4-Chloro-3-methylphenol	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
4-Chloroaniline	ug/L	20 U	NR	20 U	20 U	NR	20 U	NR	20 U	NR
4-Chlorophenyl Phenyl Ether	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
4-Nitroaniline	ug/L	50 U	NR	50 U	50 U	NR	50 U	NR	50 U	NR
4-Nitrophenol	ug/L	50 U	NR	50 U	50 U	NR	50 UJ	NR	50 U	NR
Acenaphthene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Acenaphthylene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Anthracene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR

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Table III-A2
Large Pond Surface Water Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth	Large Pond Surface Water								
		P11W 11/18/02 Surface	P11W-Filtered 11/18/02 Surface	P12W[a] 11/18/02 Surface	LPond-1-W (Total) 06/19/03 Surface	LPond-1-W (Dissolved) 06/19/03 Surface	LPond-2-W (Total) 06/25/03 Surface	LPond-2-W (Dissolved) 06/25/03 Surface	LPond-3-W (Total) 06/19/03 Surface	LPond-3-W (Dissolved) 06/19/03 Surface
SVOCs	**Units**									
Benzo(a)anthracene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Benzo(a)pyrene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Benzo(b)fluoranthene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Benzo(g,h,i)perylene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Benzo(k)fluoranthene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
bis(2-Chloroethoxy)methane	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
bis(2-Chloroethyl)ether	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
bis(2-Ethylhexyl)phthalate	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Butyl Benzyl Phthalate	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Carbazole	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Chrysene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Dibenzo(a,h)anthracene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Dibenzofuran	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Diethyl Phthalate	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Dimethyl Phthalate	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Di-n-butylphthalate	ug/L	10 U	NR	1.3 J	10 U	NR	10 U	NR	10 U	NR
Di-n-octylphthalate	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Fluoranthene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Fluorene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Hexachlorobenzene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Hexachlorobutadiene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Hexachlorocyclopentadiene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Hexachloroethane	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Indeno(1,2,3-cd)pyrene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Isophorone	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Naphthalene	ug/L	10 U	NR	4.3 J	10 U	NR	10 U	NR	10 U	NR
Nitrobenzene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
N-Nitroso-di-n-propylamine	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
N-Nitrosodiphenylamine	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Pentachlorophenol	ug/L	1 U	NR	1 U	1 U	NR	1 U	NR	1 U	NR
Phenanthrene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Phenol	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Pyrene	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
Pesticides										
4,4'-DDD	ug/L	0.1 UJ	NR	0.1 UJ	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR
4,4'-DDE	ug/L	0.1 UJ	NR	0.1 UJ	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR
4,4'-DDT	ug/L	0.028 J	NR	0.1 UJ	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR
Aldrin	ug/L	0.05 UJ	NR	0.0089 J	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR
alpha-BHC	ug/L	0.05 UJ	NR	0.05 UJ	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR
alpha-Chlordane	ug/L	0.05 UJ	NR	0.05 UJ	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR
beta-BHC	ug/L	0.05 UJ	NR	0.0079 J	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR
delta-BHC	ug/L	0.05 UJ	NR	0.05 UJ	0.05 R	NR	0.05 U	NR	0.05 R	NR
Dieldrin	ug/L	0.01 J	NR	0.1 UJ	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR
Endosulfan I	ug/L	0.05 UJ	NR	0.05 UJ	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR
Endosulfan II	ug/L	0.1 UJ	NR	0.1 UJ	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR
Endosulfan Sulfate	ug/L	0.1 UJ	NR	0.1 UJ	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR
Endrin	ug/L	0.1 UJ	NR	0.1 UJ	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR
Endrin Aldehyde	ug/L	0.1 UJ	NR	0.1 UJ	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR
Endrin Ketone	ug/L	0.1 UJ	NR	0.1 UJ	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR
gamma-BHC (Lindane)	ug/L	0.05 UJ	NR	0.05 UJ	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR
gamma-Chlordane	ug/L	0.05 UJ	NR	0.05 UJ	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR
Heptachlor	ug/L	0.05 UJ	NR	0.05 UJ	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR
Heptachlor Epoxide	ug/L	0.05 UJ	NR	0.05 UJ	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR
Methoxychlor	ug/L	0.5 UJ	NR	0.5 UJ	0.5 UJ	NR	0.5 U	NR	0.5 UJ	NR
Toxaphene	ug/L	5 UJ	NR	5 UJ	5 UJ	NR	5 U	NR	5 UJ	NR
Herbicides										
2,4-D	ug/L	0.5 U	NR	0.5 U	0.5 U	NR	0.5 U	NR	0.5 U	NR
2,4-DB	ug/L	0.5 U	NR	0.5 U	0.5 UJ	NR	0.5 U	NR	0.5 UJ	NR
2,4,5-T	ug/L	0.5 U	NR	0.5 U	0.5 UJ	NR	0.5 U	NR	0.5 UJ	NR
2,4,5-TP (Silvex)	ug/L	0.5 U	NR	0.5 U	0.5 U	NR	0.5 U	NR	0.5 U	NR
Dalapon	ug/L	120 U	NR	120 U	120 U	NR	120 U	NR	120 U	NR
Dicamba	ug/L	1.2 U	NR	1.2 U	1.2 U	NR	1.2 U	NR	1.2 U	NR
Dichlorprop	ug/L	6 U	NR	6 U	6 U	NR	6 U	NR	6 U	NR
Dinoseb	ug/L	10 U	NR	10 U	10 U	NR	10 U	NR	10 U	NR
MCPA	ug/L	120 U	NR	120 U	120 U	NR	120 U	NR	120 U	NR
MCPP	ug/L	120 U	NR	120 U	120 U	NR	120 U	NR	120 U	NR

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PCBs	**Units**									
Decachlorobiphenyl	ug/L	0.5 U	NR	0.5 U	0.5 U	NR	0.5 U	NR	0.5 U	NR
Dichlorobiphenyl	ug/L	0.1 U	NR	0.1 U	0.1 U	NR	0.1 U	NR	0.1 U	NR
Heptachlorobiphenyl	ug/L	0.3 U	NR	0.3 U	0.3 U	NR	0.3 U	NR	0.3 U	NR
Hexachlorobiphenyl	ug/L	0.2 U	NR	0.2 U	0.2 U	NR	0.2 U	NR	0.2 U	NR
Monochlorobiphenyl	ug/L	0.1 U	NR	0.1 U	0.1 U	NR	0.1 U	NR	0.1 U	NR
Nonachlorobiphenyl	ug/L	0.5 U	NR	0.5 U	0.5 U	NR	0.5 U	NR	0.5 U	NR
Octachlorobiphenyl	ug/L	0.3 U	NR	0.3 U	0.3 U	NR	0.3 U	NR	0.3 U	NR
Pentachlorobiphenyl	ug/L	0.2 U	NR	0.2 U	0.2 U	NR	0.2 U	NR	0.2 U	NR
Tetrachlorobiphenyl	ug/L	0.2 U	NR	0.2 U	0.2 U	NR	0.2 U	NR	0.2 U	NR
Trichlorobiphenyl	ug/L	0.1 U	NR	0.1 U	0.1 U	NR	0.1 U	NR	0.1 U	NR
Total PCBs	ug/L	0.5 U	NA	0.5 U	0.5 U	NA	0.5 U	NA	0.5 U	NA
Dioxins/Furans										
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/L	0.00018	NR	NR	0.000006 U	NR	NR	NR	NR	NR
1,2,3,4,6,7,8-HpCDF	ug/L	0.000026 J	NR	NR	0.0000031 U	NR	NR	NR	NR	NR
1,2,3,4,7,8,9-HpCDF	ug/L	0.0000024 UJ	NR	NR	0.0000039 U	NR	NR	NR	NR	NR
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	ug/L	0.0000011 U	NR	NR	0.0000054 U	NR	NR	NR	NR	NR
1,2,3,4,7,8-HxCDF	ug/L	0.000009 U	NR	NR	0.0000042 U	NR	NR	NR	NR	NR
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	ug/L	0.0000066 U	NR	NR	0.000005 U	NR	NR	NR	NR	NR
1,2,3,6,7,8-HxCDF	ug/L	0.0000035 U	NR	NR	0.0000023 U	NR	NR	NR	NR	NR
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	ug/L	0.0000034 U	NR	NR	0.0000047 U	NR	NR	NR	NR	NR
1,2,3,7,8,9-HxCDF	ug/L	0.00000088 U	NR	NR	0.0000028 U	NR	NR	NR	NR	NR
1,2,3,7,8-Pentachlorodibenzofuran	ug/L	0.0000057 U	NR	NR	0.0000044 U	NR	NR	NR	NR	NR
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	ug/L	0.0000022 U	NR	NR	0.0000068 U	NR	NR	NR	NR	NR
2,3,4,6,7,8-HxCDF	ug/L	0.0000023 U	NR	NR	0.0000026 U	NR	NR	NR	NR	NR
2,3,4,7,8-PeCDF	ug/L	0.000012 U	NR	NR	0.0000062 U	NR	NR	NR	NR	NR
2,3,7,8-TCDD	ug/L	0.00000082 U	NR	NR	0.0000037 U	NR	NR	NR	NR	NR
2,3,7,8-Tetrachlorodibenzofuran	ug/L	0.000023	NR	NR	0.000013	NR	NR	NR	NR	NR
OCDD	ug/L	0.0023	NR	NR	0.0000094 U	NR	NR	NR	NR	NR
OCDF	ug/L	0.00011 J	NR	NR	0.000012 U	NR	NR	NR	NR	NR
Total HpCDD	ug/L	0.00034	NR	NR	0.000006 U	NR	NR	NR	NR	NR
Total HpCDF	ug/L	0.000085	NR	NR	0.0000039 U	NR	NR	NR	NR	NR
Total HxCDD	ug/L	0.000014 U	NR	NR	0.0000054 U	NR	NR	NR	NR	NR
Total HxCDF	ug/L	0.000013 U	NR	NR	0.0000082 U	NR	NR	NR	NR	NR
Total PeCDD	ug/L	0.0000022 U	NR	NR	0.0000068 U	NR	NR	NR	NR	NR
Total PeCDF	ug/L	0.000025 U	NR	NR	0.000056	NR	NR	NR	NR	NR
Total TCDD	ug/L	0.00000087 U	NR	NR	0.0000037 U	NR	NR	NR	NR	NR
Total TCDF	ug/L	0.00012	NR	NR	0.00024	NR	NR	NR	NR	NR
Metals										
Aluminum	mg/L	7.7 J	0.2 UJ	NR	0.2 UJ	0.2 UJ	0.2 J	0.2 J	0.2 UJ	0.2 UJ
Antimony	mg/L	0.02 UJ	0.02 UJ	NR	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	mg/L	0.0054 J	0.0039 J	NR	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	mg/L	0.2	0.11	NR	0.12	0.12	0.12	0.13	0.14	0.14
Beryllium	mg/L	0.004 U	0.004 U	NR	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	mg/L	0.00065 J	0.005 U	NR	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium	mg/L	57	56	NR	79	82	77	79	91	89
Chromium	mg/L	0.01	0.01 U	NR	0.01 U	0.01 U	0.01 U	0.0022 U	0.01 U	0.01 U
Cobalt	mg/L	0.0036 J	0.01 U	NR	0.01 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	mg/L	0.013 J	0.02 U	NR	0.0032 J	0.004 J	0.02 U	0.0031	0.02 U	0.02 U
Iron	mg/L	8.9	0.05 U	NR	0.33 J	0.35	0.07 J	0.084 UJ	0.052	0.043
Lead	mg/L	0.014	0.005 U	NR	0.0027 J	0.0029 J	0.005 UJ	0.005 UJ	0.005 U	0.005 U
Magnesium	mg/L	15	13	NR	22	23	24	24	24	23
Manganese	mg/L	0.46	0.035	NR	0.22	0.27	0.046	0.068	0.039	0.042
Mercury	mg/L	0.0002 U	0.0002 U	NR	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	0.0093 J	0.04 U	NR	0.0031 J	0.0027 J	0.04 U	0.0023	0.04 UJ	0.04 UJ
Potassium	mg/L	5.6	4.2	NR	0.64	0.66	0.51 J	0.54 J	0.49	0.46
Selenium	mg/L	0.01 U	0.01 U	NR	0.01 U	0.01 U	0.01 UJ	0.01 UJ	0.01 U	0.01 U
Silver	mg/L	0.01 U	0.01 U	NR	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	mg/L	6.7	6.2	NR	5.8	5.9	7.6	7.9	7.1	6.8
Thallium	mg/L	0.01 U	0.01 U	NR	0.01 U	0.01 U	0.01 UJ	0.01 UJ	0.01 U	0.01 U
Vanadium	mg/L	0.023	0.0016 J	NR	0.01 J	0.00094 J	0.0013 U	0.0017 U	0.00084 J	0.01 UJ
Zinc	mg/L	0.052	0.02 UJ	NR	0.018	0.022	0.013	0.014	0.013	0.013
Other Chemistry										
Hardness, Carbonate	mg/L as Ca	200	NR	220	370	NR	380	NR	390	NR

NOTES:

U = Not detected at the MDL.

J = The concentration was detected at a value below the MDL.

UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.

NR = Not analyzed

NA = Not applicable

a - P12W was originally intended as a field duplicate of P11W. It was actually run as a field sample after filtration due to high suspended sediment. It was filtered for Hardness,VOCs, SVOCs, PCBs, Pesticides and Herbicides

Table III-A3
Small Pond Surface Water Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth	Small Pond Surface Water SPond-1-W (Total) 06/13/03 Surface	SPond-1-W (Dissolved) 06/13/03 Surface	SPond-2-W (Total) 06/13/03 Surface	SPond-2-W (Dissolved) 06/13/03 Surface	SPond-2-W (Dup) (Total) 06/13/03 Surface	SPond-2-W (Dup) (Dissolved) 06/13/03 Surface	SPond-3-W (Total) 06/13/03 Surface	SPond-3-W (Dissolved) 06/13/03 Surface
VOCs	**Units**								
1,1,1-Trichloroethane	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
1,1,2,2-Tetrachloroethane	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
1,1,2-Trichloroethane	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
1,1-Dichloroethane	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
1,1-Dichloroethylene	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
1,2-Dichloroethane	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
1,2-Dichloroethene (total)	ug/L	2 UJ	NR	2 UJ	NR	2 UJ	NR	2 UJ	NR
1,2-Dichloropropane	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
2-Butanone (MEK)	ug/L	10 U	NR	1.2 J	NR	10 U	NR	10 U	NR
2-Hexanone	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
4-Methyl-2-pentanone (MIBK)	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
Acetone	ug/L	25 U	NR	25 U	NR	25 U	NR	25 U	NR
Benzene	ug/L	0.72 J	NR	1 U	NR	1 U	NR	0.099 J	NR
Bromodichloromethane	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Bromoform	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Bromomethane	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Carbon Disulfide	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Carbon Tetrachloride	ug/L	1 UJ	NR	1 UJ	NR	1 UJ	NR	1 UJ	NR
Chlorobenzene	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Chloroethane	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Chloroform	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Chloromethane	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
cis-1,3-Dichloropropene	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Dibromochloromethane	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Ethylbenzene	ug/L	0.45 J	NR	1 U	NR	1 U	NR	1 U	NR
Methylene Chloride	ug/L	5 U	NR	5 U	NR	5 U	NR	5 U	NR
Styrene (Monomer)	ug/L	2.8	NR	1 U	NR	1 U	NR	1 U	NR
Tetrachloroethene	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Toluene	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
trans-1,3-Dichloropropene	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Trichloroethylene	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Vinyl chloride	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Xylenes, Total	ug/L	2 U	NR	2 U	NR	2 U	NR	2 U	NR
SVOCs									
1,2,4-Trichlorobenzene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
1,2-Dichlorobenzene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
1,3-Dichlorobenzene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
1,4-Dichlorobenzene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
2,2'-Oxybis(1-Chloropropane)	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
2,4,5-Trichlorophenol	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
2,4,6-Trichlorophenol	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
2,4-Dichlorophenol	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
2,4-Dimethylphenol	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
2,4-Dinitrophenol	ug/L	50 U	NR	50 U	NR	50 U	NR	50 UJ	NR
2,4-Dinitrotoluene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
2,6-Dinitrotoluene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
2-Chloronaphthalene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
2-Chlorophenol	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
2-Methylnaphthalene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
2-Methylphenol (o-Cresol)	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
2-Nitroaniline	ug/L	50 U	NR	50 U	NR	50 U	NR	50 UJ	NR
2-Nitrophenol	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
3,3'-Dichlorobenzidine	ug/L	20 U	NR	20 U	NR	20 U	NR	20 UJ	NR
3/4-Methylphenol (m&p-Cresol)	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
3-Nitroaniline	ug/L	50 U	NR	50 U	NR	50 U	NR	50 UJ	NR
4,6-Dinitro-2-methylphenol	ug/L	50 U	NR	50 U	NR	50 U	NR	50 UJ	NR
4-Bromophenyl Phenyl Ether	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
4-Chloro-3-methylphenol	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
4-Chloroaniline	ug/L	20 U	NR	20 U	NR	20 U	NR	20 U	NR
4-Chlorophenyl Phenyl Ether	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
4-Nitroaniline	ug/L	50 U	NR	50 U	NR	50 U	NR	50 UJ	NR
4-Nitrophenol	ug/L	50 U	NR	50 U	NR	50 U	NR	50 UJ	NR
Acenaphthene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Acenaphthylene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Anthracene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR

NOTES:
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NR = Not analyzed
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Table III-A3
Small Pond Surface Water Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth	Small Pond Surface Water							
		SPond-1-W (Total) 06/13/03 Surface	SPond-1-W (Dissolved) 06/13/03 Surface	SPond-2-W (Total) 06/13/03 Surface	SPond-2-W (Dissolved) 06/13/03 Surface	SPond-2-W (Dup) (Total) 06/13/03 Surface	SPond-2-W (Dup) (Dissolved) 06/13/03 Surface	SPond-3-W (Total) 06/13/03 Surface	SPond-3-W (Dissolved) 06/13/03 Surface
SVOCs	**Units**								
Benzo(a)anthracene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Benzo(a)pyrene	ug/L	1.5 J	NR	10 U	NR	10 U	NR	4.6 J	NR
Benzo(b)fluoranthene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Benzo(g,h,i)perylene	ug/L	2.7 J	NR	10 U	NR	10 U	NR	3.4 J	NR
Benzo(k)fluoranthene	ug/L	10 U	NR	10 U	NR	10 U	NR	7.2 J	NR
bis(2-Chloroethoxy)methane	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
bis(2-Chloroethyl)ether	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
bis(2-Ethylhexyl)phthalate	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Butyl Benzyl Phthalate	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Carbazole	ug/L	10 UJ	NR	10 UJ	NR	10 UJ	NR	10 UJ	NR
Chrysene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Dibenzo(a,h)anthracene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Dibenzofuran	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Diethyl Phthalate	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Dimethyl Phthalate	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Di-n-butylphthalate	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Di-n-octylphthalate	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Fluoranthene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Fluorene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Hexachlorobenzene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Hexachlorobutadiene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
Hexachlorocyclopentadiene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Hexachloroethane	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
Indeno(1,2,3-cd)pyrene	ug/L	10 U	NR	10 U	NR	10 U	NR	3 J	NR
Isophorone	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
Naphthalene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
Nitrobenzene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
N-Nitroso-di-n-propylamine	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
N-Nitrosodiphenylamine	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Pentachlorophenol	ug/L	1 U	NR	1 U	NR	1 U	NR	1 U	NR
Phenanthrene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Phenol	ug/L	10 U	NR	10 U	NR	10 U	NR	10 U	NR
Pyrene	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
Pesticides									
4,4'-DDD	ug/L	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR	0.1 UJ	NR
4,4'-DDE	ug/L	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR	0.1 UJ	NR
4,4'-DDT	ug/L	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR	0.1 UJ	NR
Aldrin	ug/L	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR	0.05 UJ	NR
alpha-BHC	ug/L	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR	0.05 UJ	NR
alpha-Chlordane	ug/L	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR	0.05 UJ	NR
beta-BHC	ug/L	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR	0.05 UJ	NR
delta-BHC	ug/L	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR	0.05 UJ	NR
Dieldrin	ug/L	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR	0.01 UJ	NR
Endosulfan I	ug/L	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR	0.05 UJ	NR
Endosulfan II	ug/L	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR	0.1 UJ	NR
Endosulfan Sulfate	ug/L	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR	0.1 UJ	NR
Endrin	ug/L	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR	0.1 UJ	NR
Endrin Aldehyde	ug/L	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR	0.1 UJ	NR
Endrin Ketone	ug/L	0.1 UJ	NR	0.1 U	NR	0.1 UJ	NR	0.1 UJ	NR
gamma-BHC (Lindane)	ug/L	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR	0.05 UJ	NR
gamma-Chlordane	ug/L	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR	0.05 UJ	NR
Heptachlor	ug/L	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR	0.05 UJ	NR
Heptachlor Epoxide	ug/L	0.05 UJ	NR	0.05 U	NR	0.05 UJ	NR	0.05 UJ	NR
Methoxychlor	ug/L	0.5 UJ	NR	0.5 U	NR	0.5 UJ	NR	0.5 UJ	NR
Toxaphene	ug/L	5 UJ	NR	5 U	NR	5 UJ	NR	5 UJ	NR
Herbicides									
2,4-D	ug/L	0.5 U	NR	0.5 U	NR	0.5 U	NR	0.5 U	NR
2,4-DB	ug/L	0.5 U	NR	0.5 U	NR	0.5 U	NR	0.5 U	NR
2,4,5-T	ug/L	0.5 U	NR	0.5 U	NR	0.5 U	NR	0.5 U	NR
2,4,5-TP (Silvex)	ug/L	0.5 U	NR	0.5 U	NR	0.5 U	NR	0.5 U	NR
Dalapon	ug/L	120 U	NR	120 U	NR	120 U	NR	120 U	NR
Dicamba	ug/L	1.2 U	NR	1.2 U	NR	1.2 U	NR	1.2 U	NR
Dichlorprop	ug/L	6 U	NR	6 U	NR	6 U	NR	6 U	NR
Dinoseb	ug/L	10 U	NR	10 U	NR	10 U	NR	10 UJ	NR
MCPA	ug/L	120 U	NR	120 U	NR	120 U	NR	120 U	NR
MCPP	ug/L	120 U	NR	120 U	NR	120 U	NR	120 U	NR

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Table III-A3
Small Pond Surface Water Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Sample Depth	Small Pond Surface Water SPond-1-W (Total) 06/13/03 Surface	SPond-1-W (Dissolved) 06/13/03 Surface	SPond-2-W (Total) 06/13/03 Surface	SPond-2-W (Dissolved) 06/13/03 Surface	SPond-2-W (Dup) (Total) 06/13/03 Surface	SPond-2-W (Dup) (Dissolved) 06/13/03 Surface	SPond-3-W (Total) 06/13/03 Surface	SPond-3-W (Dissolved) 06/13/03 Surface
PCBs	**Units**								
Decachlorobiphenyl	ug/L	0.5 U	NR	0.5 U	NR	0.5 U	NR	0.5 U	NR
Dichlorobiphenyl	ug/L	0.1 U	NR	0.1 U	NR	0.1 U	NR	0.1 U	NR
Heptachlorobiphenyl	ug/L	0.3 U	NR	0.3 U	NR	0.3 U	NR	0.3 U	NR
Hexachlorobiphenyl	ug/L	0.2 U	NR	0.2 U	NR	0.2 U	NR	0.2 U	NR
Monochlorobiphenyl	ug/L	0.1 U	NR	0.1 U	NR	0.1 U	NR	0.1 U	NR
Nonachlorobiphenyl	ug/L	0.5 U	NR	0.5 U	NR	0.5 U	NR	0.5 U	NR
Octachlorobiphenyl	ug/L	0.3 U	NR	0.3 U	NR	0.3 U	NR	0.3 U	NR
Pentachlorobiphenyl	ug/L	0.2 U	NR	0.05 J	NR	0.2 U	NR	0.2 U	NR
Tetrachlorobiphenyl	ug/L	0.2 U	NR	0.2 U	NR	0.2 U	NR	0.2 U	NR
Trichlorobiphenyl	ug/L	0.1 U	NR	0.1 U	NR	0.1 U	NR	0.1 U	NR
Total PCBs	ug/L	0.5 U	NA	0.05	NA	0.5 U	NA	0.5 U	NA
Dioxins/Furans									
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/L	4.9E-06 U	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,6,7,8-HpCDF	ug/L	3.6E-06 U	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8,9-HpCDF	ug/L	3.9E-06 U	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	ug/L	0.000004 U	NR	NR	NR	NR	NR	NR	NR
1,2,3,4,7,8-HxCDF	ug/L	5.3E-06 U	NR	NR	NR	NR	NR	NR	NR
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	ug/L	0.000004 U	NR	NR	NR	NR	NR	NR	NR
1,2,3,6,7,8-HxCDF	ug/L	4.9E-06 U	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	ug/L	3.7E-06 U	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8,9-HxCDF	ug/L	5.8E-06 U	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8-Pentachlorodibenzofuran	ug/L	3.7E-06 U	NR	NR	NR	NR	NR	NR	NR
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	ug/L	5.2E-06 U	NR	NR	NR	NR	NR	NR	NR
2,3,4,6,7,8-HxCDF	ug/L	5.5E-06 U	NR	NR	NR	NR	NR	NR	NR
2,3,4,7,8-PeCDF	ug/L	3.8E-06 U	NR	NR	NR	NR	NR	NR	NR
2,3,7,8-TCDD	ug/L	2.6E-06 U	NR	NR	NR	NR	NR	NR	NR
2,3,7,8-Tetrachlorodibenzofuran	ug/L	4.7E-06 U	NR	NR	NR	NR	NR	NR	NR
OCDD	ug/L	0.000015 U	NR	NR	NR	NR	NR	NR	NR
OCDF	ug/L	5.1E-06 U	NR	NR	NR	NR	NR	NR	NR
Total HpCDD	ug/L	4.9E-06 U	NR	NR	NR	NR	NR	NR	NR
Total HpCDF	ug/L	3.9E-06 U	NR	NR	NR	NR	NR	NR	NR
Total HxCDD	ug/L	0.000004 U	NR	NR	NR	NR	NR	NR	NR
Total HxCDF	ug/L	5.8E-06 U	NR	NR	NR	NR	NR	NR	NR
Total PeCDD	ug/L	0.000007 U	NR	NR	NR	NR	NR	NR	NR
Total PeCDF	ug/L	3.8E-06 U	NR	NR	NR	NR	NR	NR	NR
Total TCDD	ug/L	2.6E-06 U	NR	NR	NR	NR	NR	NR	NR
Total TCDF	ug/L	4.7E-06 U	NR	NR	NR	NR	NR	NR	NR
Metals									
Aluminum	mg/L	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
Antimony	mg/L	0.0075 U	0.0042 U	0.0046 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	mg/L	0.01 U	0.01 U	0.01 U	0.0092	0.01 U	0.01 U	0.01 U	0.01 U
Barium	mg/L	0.15	0.14	0.14	0.14	0.14	0.14	0.12	0.12
Beryllium	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium	mg/L	110	110	98	97	97	95	78	77
Chromium	mg/L	0.01 U	0.01 U	0.0012 U	0.0014 U	0.01 U	0.01 U	0.01 U	0.01 U
Cobalt	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	mg/L	0.0053	0.0055	0.0051	0.0054	0.0052	0.0051	0.0067	0.0068
Iron	mg/L	0.034	0.051	0.031	0.05 U	0.023	0.044	0.05	0.046
Lead	mg/L	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ
Magnesium	mg/L	27	25	24	24	24	24	20	20
Manganese	mg/L	0.022	0.028	0.021	0.02	0.019	0.019	0.042	0.032
Mercury	mg/L	0.00009	0.00011	0.0002 U	0.000089	0.000088	0.0002 U	0.0001	0.000086
Nickel	mg/L	0.04 U	0.04 U	0.0022	0.04 U	0.04 U	0.0024	0.04 U	0.04 U
Potassium	mg/L	2.2	2.1	1.9	1.8	1.9	1.8	2.4	2.4
Selenium	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Silver	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	mg/L	11	11	11	11	11	11	9.8	9.8
Thallium	mg/L	0.01 U	0.0069	0.01 U	0.0062	0.01 U	0.01 U	0.01 U	0.01 U
Vanadium	mg/L	0.01 U	0.01 U	0.0011 U	0.01 U	0.01 U	0.00085 U	0.00092 U	0.0013 U
Zinc	mg/L	0.016	0.017	0.024	0.022	0.016	0.014	0.02	0.018
Other Chemistry									
Hardness, Carbonate	mg/L as Ca	460	NR	400	NR	400	NR	330	NR

NOTES:

U = Not detected at the MDL.

J = The concentration was detected at a value below the MDL.

UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

397.5

NR = Not analyzed

NA = Not applicable

Table III-A4
Large Pond Sediment Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Percent Moisture	Large Pond Sediment P11S 11/18/02 47.5	 P12S (Dup of P11S) 11/18/02 NR	 LPond-S-1 06/19/03 NR	 LPond-S-2 06/25/03 NR	 LPond-S-3 06/19/03 29.7
VOCs	**Units**					
1,1,1-Trichloroethane	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
1,1,2,2-Tetrachloroethane	ug/kg	4.5 UJ	3.8 U	9.4 U	7 U	7.6 U
1,1,2-Trichloroethane	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
1,1-Dichloroethane	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
1,1-Dichloroethylene	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
1,2-Dichloroethane	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
1,2-Dichloroethene (total)	ug/kg	4.5 U	3.8 U	3.1 J	14 U	15 U
1,2-Dichloropropane	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
2-Butanone (MEK)	ug/kg	20 J	19 U	25 J	35 U	18 J
2-Hexanone	ug/kg	22 U	19 U	47 U	35 U	38 U
4-Methyl-2-pentanone (MIBK)	ug/kg	22 U	19 U	47 U	35 U	38 U
Acetone	ug/kg	2900 J	38 U	94 U	70 U	14 J
Benzene	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
Bromodichloromethane	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
Bromoform	ug/kg	4.5 UJ	3.8 U	9.4 U	7 U	7.6 U
Bromomethane	ug/kg	9 UJ	7.6 UJ	9.4 U	7 U	7.6 U
Carbon Disulfide	ug/kg	4.5 U	3.8 U	0.81 J	7 U	7.6 U
Carbon Tetrachloride	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
Chlorobenzene	ug/kg	4.5 UJ	3.8 U	9.4 U	7 U	7.6 U
Chloroethane	ug/kg	9 U	7.6 U	9.4 UJ	7 UJ	7.6 UJ
Chloroform	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
Chloromethane	ug/kg	9 UJ	7.6 UJ	9.4 U	7 U	7.6 U
cis-1,3-Dichloropropene	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
Dibromochloromethane	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
Ethylbenzene	ug/kg	4.5 UJ	2.3 J	2.6 J	0.82 J	0.9 J
Methylene Chloride	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
Styrene (Monomer)	ug/kg	4.5 UJ	3.8 U	9.4 U	7 U	7.6 U
Tetrachloroethene	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
Toluene	ug/kg	4.5 U	3.8 U	3.3 J	1.1 J	1 J
trans-1,3-Dichloropropene	ug/kg	4.5 U	3.8 U	9.4 U	7 U	7.6 U
Trichloroethylene	ug/kg	4.5 U	3.8 U	3 J	7 U	7.6 U
Vinyl chloride	ug/kg	9 U	7.6 U	9.4 U	7 U	7.6 U
Xylenes, Total	ug/kg	6.8 J	13	19 U	14 U	15 U
SVOCs						
1,2,4-Trichlorobenzene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
1,2-Dichlorobenzene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
1,3-Dichlorobenzene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
1,4-Dichlorobenzene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
2,4,5-Trichlorophenol	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
2,4,6-Trichlorophenol	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
2,4-Dichlorophenol	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
2,4-Dimethylphenol	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
2,4-Dinitrophenol	ug/kg	3600 UJ	3600 UJ	35000 U	24000 U	26000 U
2,4-Dinitrotoluene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
2,6-Dinitrotoluene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
2-Chloronaphthalene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
2-Chlorophenol	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
2-Methylnaphthalene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
2-Methylphenol (o-Cresol)	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
2-Nitroaniline	ug/kg	3600 UJ	3600 UJ	35000 U	24000 U	26000 U
2-Nitrophenol	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
3,3'-Dichlorobenzidine	ug/kg	1400 U	1400 U	13000 U	9400 U	10000 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
3-Nitroaniline	ug/kg	3600 UJ	3600 UJ	35000 U	24000 U	26000 U
4,6-Dinitro-2-methylphenol	ug/kg	3600 U	3600 U	35000 U	24000 U	26000 U
4-Bromophenyl Phenyl Ether	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
4-Chloro-3-methylphenol	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
4-Chloroaniline	ug/kg	1400 U	1400 U	13000 U	9400 U	10000 U
4-Chlorophenyl Phenyl Ether	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
4-Nitroaniline	ug/kg	3600 U	3600 U	35000 U	24000 U	26000 U
4-Nitrophenol	ug/kg	3600 U	3600 U	35000 U	24000 U	26000 U
Acenaphthene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Acenaphthylene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Anthracene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.
NR = Not analyzed

Table III-A4
Large Pond Sediment Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Percent Moisture	Large Pond Sediment P11S 11/18/02 47.5	 P12S (Dup of P11S) 11/18/02 NR	 LPond-S-1 06/19/03 NR	 LPond-S-2 06/25/03 NR	 LPond-S-3 06/19/03 29.7
SVOCs	**Units**					
Benzo(a)anthracene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Benzo(a)pyrene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Benzo(b)fluoranthene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Benzo(g,h,i)perylene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Benzo(k)fluoranthene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
bis(2-Chloroethoxy)methane	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
bis(2-Chloroethyl)ether	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
bis(2-Ethylhexyl)phthalate	ug/kg	700 U	700 U	630 J	4700 U	5000 U
Butyl Benzyl Phthalate	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Carbazole	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Chrysene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Dibenzo(a,h)anthracene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Dibenzofuran	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Diethyl Phthalate	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Dimethyl Phthalate	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Di-n-butylphthalate	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Di-n-octylphthalate	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Fluoranthene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Fluorene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Hexachlorobenzene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Hexachlorobutadiene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Hexachlorocyclopentadiene	ug/kg	700 UJ	700 UJ	6700 U	4700 U	5000 U
Hexachloroethane	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Indeno(1,2,3-cd)pyrene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Isophorone	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Naphthalene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Nitrobenzene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
N-Nitroso-di-n-propylamine	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
N-Nitrosodiphenylamine	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Pentachlorophenol	ug/kg	36 R	2.5 J	1.8 J	24 U	26 U
Phenanthrene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Phenol	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Pyrene	ug/kg	700 U	700 U	6700 U	4700 U	5000 U
Pesticides						
4,4'-DDD	ug/kg	7 UJ	7 UJ	340 UJ	94 UJ	20 R
4,4'-DDE	ug/kg	7 U	7 U	340 UJ	94 UJ	10 R
4,4'-DDT	ug/kg	7 R	57 J	340 UJ	94 UJ	74 J
Aldrin	ug/kg	3.6 U	3.6 U	170 UJ	48 UJ	5.2 UJ
alpha-BHC	ug/kg	3.6 U	3.6 U	170 UJ	48 UJ	5.2 UJ
alpha-Chlordane	ug/kg	3.6 U	3.6 U	170 UJ	48 UJ	5.2 R
beta-BHC	ug/kg	3.6 U	3.6 U	170 UJ	48 UJ	5.2 UJ
delta-BHC	ug/kg	3.6 U	3.6 U	170 UJ	48 UJ	5.2 UJ
Dieldrin	ug/kg	7 U	7 U	340 UJ	94 UJ	10 R
Endosulfan I	ug/kg	3.6 U	3.6 U	170 UJ	48 UJ	5.2 R
Endosulfan II	ug/kg	7 U	7 U	340 UJ	94 UJ	10 UJ
Endosulfan Sulfate	ug/kg	7 U	7 U	340 UJ	94 UJ	10 UJ
Endrin	ug/kg	7 U	7 U	340 UJ	94 UJ	10 R
Endrin Aldehyde	ug/kg	7 U	7 U	340 UJ	94 UJ	10 UJ
Endrin Ketone	ug/kg	7 UJ	7 UJ	31 J	94 UJ	10 UJ
gamma-BHC (Lindane)	ug/kg	3.6 U	3.6 U	53 J	48 UJ	1.1 J
gamma-Chlordane	ug/kg	3.6 U	3.6 U	170 UJ	48 UJ	5.2 R
Heptachlor	ug/kg	3.6 UJ	3.6 UJ	170 UJ	48 UJ	5.2 UJ
Heptachlor Epoxide	ug/kg	3.6 U	3.6 U	170 UJ	48 UJ	5.2 UJ
Methoxychlor	ug/kg	36 UJ	36 UJ	1700 UJ	480 UJ	52 UJ
Toxaphene	ug/kg	360 U	360 U	17000 UJ	4800 UJ	520 UJ
Herbicides						
2,4-D	ug/kg	18 R	18 R	17 U	12 U	12 U
2,4-DB	ug/kg	18 R	18 R	17 U	12 UJ	12 U
2,4,5-T	ug/kg	18 R	18 R	17 U	12 U	12 U
2,4,5-TP (Silvex)	ug/kg	18 R	18 R	17 U	12 U	12 U
Dalapon	ug/kg	4200 R	4200 R	4100 U	2800 U	3000 U
Dicamba	ug/kg	42 R	42 R	41 U	28 U	30 U
Dichlorprop	ug/kg	210 R	3.7 J	200 U	140 U	150 U
Dinoseb	ug/kg	700 UJ	700 UJ	6700 U	4700 U	5000 U
MCPA	ug/kg	4200 R	4200 R	4100 U	2800 U	3000 U
MCPP	ug/kg	4200 R	630 J	4100 U	1600 J	3000 U

NOTES:
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UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.
NR = Not analyzed

Table III-A4
Large Pond Sediment Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Percent Moisture	Large Pond Sediment P11S 11/18/02 47.5	 P12S (Dup of P11S) 11/18/02 NR	 LPond-S-1 06/19/03 NR	 LPond-S-2 06/25/03 NR	 LPond-S-3 06/19/03 29.7
PCBs	**Units**					
Decachlorobiphenyl	ug/kg	36 U	36 U	350 UJ	24 UJ	260 UJ
Dichlorobiphenyl	ug/kg	7 U	7 U	67 U	4.7 U	50 U
Heptachlorobiphenyl	ug/kg	130	4.3 J	2100	160	150 U
Hexachlorobiphenyl	ug/kg	200	16	6900	390	100
Monochlorobiphenyl	ug/kg	7 U	7 U	67 U	4.7 U	50 U
Nonachlorobiphenyl	ug/kg	5.8 J	36 U	170 J	7.4 J	260 U
Octachlorobiphenyl	ug/kg	24	21 U	260 J	31 J	150 U
Pentachlorobiphenyl	ug/kg	400	48	15000	630	150
Tetrachlorobiphenyl	ug/kg	330	93	10000 J	340 J	170 J
Trichlorobiphenyl	ug/kg	69	14	1100	24	16 J
Total PCBs	ug/kg	1159	175	35530	1582	436
Dioxins/Furans						
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	2.2 J	NR	NR	NR	3.7
1,2,3,4,6,7,8-HpCDF	ug/kg	0.31 J	NR	NR	NR	0.31
1,2,3,4,7,8,9-HpCDF	ug/kg	0.023 J	NR	NR	NR	0.016
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	0.0086 J	NR	NR	NR	0.006 J
1,2,3,4,7,8-HxCDF	ug/kg	0.032 J	NR	NR	NR	0.019
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	0.065 J	NR	NR	NR	0.094
1,2,3,6,7,8-HxCDF	ug/kg	0.018 J	NR	NR	NR	0.01
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	ug/kg	0.023 J	NR	NR	NR	0.018
1,2,3,7,8,9-HxCDF	ug/kg	0.0035 UJ	NR	NR	NR	0.00074 U
1,2,3,7,8-Pentachlorodibenzofuran	ug/kg	0.025 J	NR	NR	NR	0.011
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	ug/kg	0.0045 UJ	NR	NR	NR	0.0046 J
2,3,4,6,7,8-HxCDF	ug/kg	0.019 J	NR	NR	NR	0.0086
2,3,4,7,8-PeCDF	ug/kg	0.05 J	NR	NR	NR	0.027
2,3,7,8-TCDD	ug/kg	0.0072 J	NR	NR	NR	0.013
2,3,7,8-Tetrachlorodibenzofuran	ug/kg	0.11 J	NR	NR	NR	0.056
OCDD	ug/kg	26 J	NR	NR	NR	34
OCDF	ug/kg	1.3 J	NR	NR	NR	1.8
Total HpCDD	ug/kg	4.3 J	NR	NR	NR	7.3
Total HpCDF	ug/kg	1.4 J	NR	NR	NR	1.6
Total HxCDD	ug/kg	0.39 J	NR	NR	NR	0.53
Total HxCDF	ug/kg	0.75 J	NR	NR	NR	0.47
Total PeCDD	ug/kg	0.1 J	NR	NR	NR	0.092
Total PeCDF	ug/kg	0.46 J	NR	NR	NR	0.3
Total TCDD	ug/kg	0.085 J	NR	NR	NR	0.1
Total TCDF	ug/kg	0.86 J	NR	NR	NR	0.57
Metals						
Aluminum	mg/kg	11000	14000	14000	10000	8900
Antimony	mg/kg	3.9 UJ	4.3 U	2.7 J	2.6 J	1.2 J
Arsenic	mg/kg	5.2	7.3	6.4 J	3.4 J	3.9 J
Barium	mg/kg	200	260	370	170	160
Beryllium	mg/kg	0.77 J	0.93	0.98	0.76	0.63
Cadmium	mg/kg	1.3	1.7	13	2.1	1.1
Calcium	mg/kg	13000	16000	14000	8900	7600
Chromium	mg/kg	19	24	79	18	15
Cobalt	mg/kg	8.8	11	12	8.5	7.2
Copper	mg/kg	30	39	88	32	22
Iron	mg/kg	20000	25000	24000	17000	15000
Lead	mg/kg	43	53	320	39	29
Magnesium	mg/kg	4200	5500	4500	4400	3300
Manganese	mg/kg	610	770	460	340	400
Mercury	mg/kg	0.13	0.13	0.87	1	0.064
Nickel	mg/kg	21	28	31 J	20 J	18 J
Potassium	mg/kg	1600	2000	1700 J	1300 J	1200 J
Selenium	mg/kg	1.9 U	1.9 U	2.4	1.3 U	1.5 U
Silver	mg/kg	1.9 UJ	2.1 UJ	0.52	0.2	1.5 U
Sodium	mg/kg	87 J	110	88	75	65
Thallium	mg/kg	1.9 U	1.9 U	1.9 U	1.3 U	1.5 U
Vanadium	mg/kg	29	38	36	28	25
Zinc	mg/kg	190 J	240 J	380 J	220 J	160 J
Other Chemistry						
Total Organic Carbon	mg/kg	17000	17000	27000	18000	12000
pH	units	7.0	7.1	7.2	NR	7.1

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.
NR = Not analyzed

Table III-A5
Small Pond Sediment Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Percent Moisture	Small Pond Sediment SPond-S-1 06/13/03 NR	 SPond-S-2 06/13/03 25.3	 SPond-S-3 06/13/03 NR	 SPond-S-3 (Dup) 06/13/03 NR
VOCs	**Units**				
1,1,1-Trichloroethane	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
1,1,2,2-Tetrachloroethane	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
1,1,2-Trichloroethane	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
1,1-Dichloroethane	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
1,1-Dichloroethylene	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
1,2-Dichloroethane	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
1,2-Dichloroethene (total)	ug/kg	17 U	14 U	13 U	15 U
1,2-Dichloropropane	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
2-Butanone (MEK)	ug/kg	19 J	17 J	32 U	17 J
2-Hexanone	ug/kg	42 U	36 U	32 U	38 U
4-Methyl-2-pentanone (MIBK)	ug/kg	42 U	36 U	32 U	38 U
Acetone	ug/kg	12 J	7.2 J	64 U	76 U
Benzene	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Bromodichloromethane	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Bromoform	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Bromomethane	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Carbon Disulfide	ug/kg	0.76 J	7.1 U	6.4 U	7.6 U
Carbon Tetrachloride	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Chlorobenzene	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Chloroethane	ug/kg	8.3 UJ	7.1 UJ	6.4 UJ	7.6 UJ
Chloroform	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Chloromethane	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
cis-1,3-Dichloropropene	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Dibromochloromethane	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Ethylbenzene	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Methylene Chloride	ug/kg	8.4 U	2 J	6.4 U	7.6 U
Styrene (Monomer)	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Tetrachloroethene	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Toluene	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
trans-1,3-Dichloropropene	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Trichloroethylene	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Vinyl chloride	ug/kg	8.3 U	7.1 U	6.4 U	7.6 U
Xylenes, Total	ug/kg	17 U	14 U	13 U	15 U
SVOCs					
1,2,4-Trichlorobenzene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
1,2-Dichlorobenzene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
1,3-Dichlorobenzene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
1,4-Dichlorobenzene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	560 UJ	480 UJ	480 UJ	500 U
2,4,5-Trichlorophenol	ug/kg	560 UJ	480 UJ	480 UJ	500 U
2,4,6-Trichlorophenol	ug/kg	560 UJ	480 UJ	480 UJ	500 U
2,4-Dichlorophenol	ug/kg	560 UJ	480 UJ	480 UJ	500 U
2,4-Dimethylphenol	ug/kg	88 UJ	480 UJ	480 UJ	500 U
2,4-Dinitrophenol	ug/kg	2900 UJ	2500 UJ	2500 UJ	2600 U
2,4-Dinitrotoluene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
2,6-Dinitrotoluene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
2-Chloronaphthalene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
2-Chlorophenol	ug/kg	560 UJ	480 UJ	480 UJ	500 U
2-Methylnaphthalene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
2-Methylphenol (o-Cresol)	ug/kg	560 UJ	480 UJ	480 UJ	500 U
2-Nitroaniline	ug/kg	2900 UJ	2500 UJ	2500 UJ	2600 U
2-Nitrophenol	ug/kg	560 UJ	480 UJ	480 UJ	500 U
3,3'-Dichlorobenzidine	ug/kg	1100 U	960 U	960 U	1000 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	560 UJ	480 UJ	480 UJ	500 U
3-Nitroaniline	ug/kg	2900 UJ	2500 UJ	2500 UJ	2600 U
4,6-Dinitro-2-methylphenol	ug/kg	2900 U	2500 UJ	2500 U	2600 U
4-Bromophenyl Phenyl Ether	ug/kg	560 U	480 UJ	480 U	500 U
4-Chloro-3-methylphenol	ug/kg	560 UJ	480 UJ	480 UJ	500 U
4-Chloroaniline	ug/kg	1100 UJ	960 UJ	960 UJ	1000 U
4-Chlorophenyl Phenyl Ether	ug/kg	560 UJ	480 UJ	480 UJ	500 U
4-Nitroaniline	ug/kg	2900 UJ	2500 UJ	2500 UJ	2600 U
4-Nitrophenol	ug/kg	2900 UJ	2500 UJ	2500 UJ	2600 U
Acenaphthene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
Acenaphthylene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
Anthracene	ug/kg	560 U	480 UJ	480 U	500 U

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.
NR = Not analyzed

Table III-A5
Small Pond Sediment Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Percent Moisture	Small Pond Sediment			
		SPond-S-1 06/13/03 NR	SPond-S-2 06/13/03 25.3	SPond-S-3 06/13/03 NR	SPond-S-3 (Dup) 06/13/03 NR
SVOCs	**Units**				
Benzo(a)anthracene	ug/kg	560 U	480 U	480 U	500 U
Benzo(a)pyrene	ug/kg	560 U	480 U	480 U	500 U
Benzo(b)fluoranthene	ug/kg	560 U	480 U	480 U	500 U
Benzo(g,h,i)perylene	ug/kg	560 U	480 U	480 U	500 U
Benzo(k)fluoranthene	ug/kg	560 U	480 U	480 U	500 U
bis(2-Chloroethoxy)methane	ug/kg	560 UJ	480 UJ	480 UJ	500 U
bis(2-Chloroethyl)ether	ug/kg	560 UJ	480 UJ	480 UJ	500 U
bis(2-Ethylhexyl)phthalate	ug/kg	560 U	480 U	480 U	500 U
Butyl Benzyl Phthalate	ug/kg	560 U	480 U	480 U	500 U
Carbazole	ug/kg	560 U	480 UJ	480 U	500 U
Chrysene	ug/kg	560 U	480 U	480 U	500 U
Dibenzo(a,h)anthracene	ug/kg	560 U	480 U	480 U	500 U
Dibenzofuran	ug/kg	560 UJ	480 UJ	480 UJ	500 U
Diethyl Phthalate	ug/kg	560 UJ	480 UJ	480 UJ	500 U
Dimethyl Phthalate	ug/kg	560 UJ	480 UJ	480 UJ	500 U
Di-n-butylphthalate	ug/kg	560 U	480 UJ	480 U	500 U
Di-n-octylphthalate	ug/kg	560 U	480 U	480 U	500 U
Fluoranthene	ug/kg	560 U	480 UJ	480 U	500 U
Fluorene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
Hexachlorobenzene	ug/kg	560 U	480 UJ	480 U	500 U
Hexachlorobutadiene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
Hexachlorocyclopentadiene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
Hexachloroethane	ug/kg	560 UJ	480 UJ	480 UJ	500 U
Indeno(1,2,3-cd)pyrene	ug/kg	560 U	480 U	480 U	500 U
Isophorone	ug/kg	560 UJ	480 UJ	480 UJ	500 U
Naphthalene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
Nitrobenzene	ug/kg	560 UJ	480 UJ	480 UJ	500 U
N-Nitroso-di-n-propylamine	ug/kg	560 UJ	480 UJ	480 UJ	500 U
N-Nitrosodiphenylamine	ug/kg	560 U	480 UJ	480 U	500 U
Pentachlorophenol	ug/kg	82	14 J	1.6 J	1.7 J
Phenanthrene	ug/kg	560 U	480 UJ	480 U	500 U
Phenol	ug/kg	560 UJ	480 UJ	480 UJ	500 U
Pyrene	ug/kg	87 J	480 U	480 U	500 U
Pesticides					
4,4'-DDD	ug/kg	56 U	48 U	2.7 R	1.8 R
4,4'-DDE	ug/kg	56 U	48 U	4.8 U	10 U
4,4'-DDT	ug/kg	56 U	48 U	4.8 U	10 U
Aldrin	ug/kg	29 U	25 U	2.5 U	5.2 U
alpha-BHC	ug/kg	29 U	25 U	2.5 U	5.2 U
alpha-Chlordane	ug/kg	29 U	25 U	2.5 U	5.2 U
beta-BHC	ug/kg	29 U	25 U	2.5 U	5.2 U
delta-BHC	ug/kg	29 U	25 U	2.5 U	5.2 U
Dieldrin	ug/kg	460 J	210 J	21	30 J
Endosulfan I	ug/kg	29 U	25 U	2.5 U	5.2 U
Endosulfan II	ug/kg	56 U	48 U	4.8 U	10 U
Endosulfan Sulfate	ug/kg	56 U	48 U	4.8 U	10 U
Endrin	ug/kg	56 U	48 U	4.8 U	10 U
Endrin Aldehyde	ug/kg	56 U	48 U	4.8 UJ	10 UJ
Endrin Ketone	ug/kg	56 U	48 U	4.8 U	10 U
gamma-BHC (Lindane)	ug/kg	17 J	5.8 J	2.5 U	1 J
gamma-Chlordane	ug/kg	29 U	25 U	2.5 U	5.2 U
Heptachlor	ug/kg	29 U	25 U	2.5 UJ	5.2 UJ
Heptachlor Epoxide	ug/kg	29 U	25 U	2.5 U	5.2 U
Methoxychlor	ug/kg	290 U	250 U	25 UJ	52 UJ
Toxaphene	ug/kg	2900 U	2500 U	250 U	520 U
Herbicides					
2,4-D	ug/kg	7.2 J	6.9 J	12 U	12 U
2,4-DB	ug/kg	14 U	12 U	12 U	12 U
2,4,5-T	ug/kg	14 U	12 U	12 U	12 U
2,4,5-TP (Silvex)	ug/kg	14 U	12 U	12 U	12 U
Dalapon	ug/kg	3400 U	2900 U	2900 U	3000 U
Dicamba	ug/kg	34 U	29 U	29 U	30 U
Dichlorprop	ug/kg	170 U	140 U	140 U	150 U
Dinoseb	ug/kg	560 U	480 U	480 U	500 U
MCPA	ug/kg	3400 U	2900 U	2900 U	3000 U
MCPP	ug/kg	3400 U	2900 U	2900 U	3000 U

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
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NR = Not analyzed

Table III-A5
Small Pond Sediment Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Percent Moisture	Small Pond Sediment SPond-S-1 06/13/03 NR	 SPond-S-2 06/13/03 25.3	 SPond-S-3 06/13/03 NR	 SPond-S-3 (Dup) 06/13/03 NR
PCBs	**Units**				
Decachlorobiphenyl	ug/kg	290 U	250 U	250 U	260 U
Dichlorobiphenyl	ug/kg	56 U	48 U	48 U	50 U
Heptachlorobiphenyl	ug/kg	39 J	110 J	67 J	28 J
Hexachlorobiphenyl	ug/kg	2700	940	210	180
Monochlorobiphenyl	ug/kg	56 U	48 U	48 U	50 U
Nonachlorobiphenyl	ug/kg	290 U	250 U	250 U	260 U
Octachlorobiphenyl	ug/kg	35 J	140 U	140 U	150 U
Pentachlorobiphenyl	ug/kg	13000	4700	720	890
Tetrachlorobiphenyl	ug/kg	4200	3500	470	780
Trichlorobiphenyl	ug/kg	56 U	48 U	48 U	66
Total PCBs	ug/kg	19974	9250	1467	1944
Dioxins/Furans					
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	ug/kg	NR	3.6	NR	NR
1,2,3,4,6,7,8-HpCDF	ug/kg	NR	0.77	NR	NR
1,2,3,4,7,8,9-HpCDF	ug/kg	NR	0.033	NR	NR
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	NR	0.019	NR	NR
1,2,3,4,7,8-HxCDF	ug/kg	NR	0.031	NR	NR
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	ug/kg	NR	0.28	NR	NR
1,2,3,6,7,8-HxCDF	ug/kg	NR	0.02	NR	NR
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	ug/kg	NR	0.12	NR	NR
1,2,3,7,8,9-HxCDF	ug/kg	NR	0.0016 U	NR	NR
1,2,3,7,8-Pentachlorodibenzofuran	ug/kg	NR	0.0068	NR	NR
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	ug/kg	NR	0.01	NR	NR
2,3,4,6,7,8-HxCDF	ug/kg	NR	0.016	NR	NR
2,3,4,7,8-PeCDF	ug/kg	NR	0.026	NR	NR
2,3,7,8-TCDD	ug/kg	NR	0.0013	NR	NR
2,3,7,8-Tetrachlorodibenzofuran	ug/kg	NR	0.026	NR	NR
OCDD	ug/kg	NR	24	NR	NR
OCDF	ug/kg	NR	2.1	NR	NR
Total HpCDD	ug/kg	NR	5.9	NR	NR
Total HpCDF	ug/kg	NR	2.2	NR	NR
Total HxCDD	ug/kg	NR	1.6	NR	NR
Total HxCDF	ug/kg	NR	0.76	NR	NR
Total PeCDD	ug/kg	NR	0.05	NR	NR
Total PeCDF	ug/kg	NR	0.23	NR	NR
Total TCDD	ug/kg	NR	0.035	NR	NR
Total TCDF	ug/kg	NR	0.26	NR	NR
Metals					
Aluminum	mg/kg	8300	4700	6100	5600
Antimony	mg/kg	3 U	2.7 U	2.7 U	2.8 U
Arsenic	mg/kg	8.5	3.2	3.7	5.3
Barium	mg/kg	260	160	160	160
Beryllium	mg/kg	0.52	0.3	0.37	0.38
Cadmium	mg/kg	6.2	0.63	0.98	1.1
Calcium	mg/kg	6700	7700	10000	10000
Chromium	mg/kg	39	11	12	11
Cobalt	mg/kg	6.9	4.2	5.1	5.9
Copper	mg/kg	680	87	31	31
Iron	mg/kg	15000	9000	11000	12000
Lead	mg/kg	390	31	41	27
Magnesium	mg/kg	3900	3800	4200	4200
Manganese	mg/kg	200	220	280	270
Mercury	mg/kg	0.19	0.029	0.055	0.033
Nickel	mg/kg	91	19	16	21
Potassium	mg/kg	1300 J	880 J	1000 J	1000 J
Selenium	mg/kg	1.5 U	1.3 U	1.4 U	1.4 U
Silver	mg/kg	0.5	1.3 U	1.4 U	1.4 U
Sodium	mg/kg	150 U	140 U	120 U	140 U
Thallium	mg/kg	1.5 U	1.3 U	1.4 U	1.4 U
Vanadium	mg/kg	22	15	18	18
Zinc	mg/kg	750	140	130	120
Other Chemistry					
Total Organic Carbon	mg/kg	49000	21000	13000	16000
pH	units	7.2	7.3	7.3	7.5

NOTES:
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R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.
NR = Not analyzed

Table III-A6
Plant Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID	OFF SITE (Background)			SITE O			SITE P			
	Sample Date	PL-OS-2 10/08/02	PL-OS-3 10/08/02	PL-OS-4 10/08/02	PL-O-1 10/08/02	PL-O-2 10/08/02	PL-O-3 10/08/02	PL-P-1 10/08/02	PL-P-2 10/08/02	PL-P-3 10/08/02	PL-P-4 10/08/02
SVOCs	**Units**										
1,2,4-Trichlorobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
1,2-Dichlorobenzene	ug/kg	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ
1,3-Dichlorobenzene	ug/kg	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ
1,4-Dichlorobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4,5-Trichlorophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4,6-Trichlorophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4-Dichlorophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4-Dimethylphenol	ug/kg	990 R	990 R	990 R	990 R	990 R	990 R	990 R	990 R	990 R	990 R
2,4-Dinitrophenol	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
2,4-Dinitrotoluene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,6-Dinitrotoluene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Chloronaphthalene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Chlorophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Methylnaphthalene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Methylphenol (o-Cresol)	ug/kg	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ
2-Nitroaniline	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
2-Nitrophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
3,3'-Dichlorobenzidine	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ
3-Nitroaniline	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
4,6-Dinitro-2-methylphenol	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
4-Bromophenyl Phenyl Ether	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
4-Chloro-3-methylphenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
4-Chloroaniline	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
4-Chlorophenyl Phenyl Ether	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
4-Nitroaniline	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
4-Nitrophenol	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
Acenaphthene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Acenaphthylene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Anthracene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(a)anthracene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(a)pyrene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(b)fluoranthene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(g,h,i)perylene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	80 J	95 J	990 U	210 J
Benzo(k)fluoranthene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
bis(2-Chloroethoxy)methane	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
bis(2-Chloroethyl)ether	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
bis(2-Ethylhexyl)phthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Butyl Benzyl Phthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Carbazole	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Chrysene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Dibenzo(a,h)anthracene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Dibenzofuran	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Diethyl Phthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Dimethyl Phthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Di-n-butylphthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Di-n-octylphthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U

NOTES:
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UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
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Table III-A6
Plant Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID	OFF SITE (Background)			SITE O			SITE P			
	Sample Date	PL-OS-2 10/08/02	PL-OS-3 10/08/02	PL-OS-4 10/08/02	PL-O-1 10/08/02	PL-O-2 10/08/02	PL-O-3 10/08/02	PL-P-1 10/08/02	PL-P-2 10/08/02	PL-P-3 10/08/02	PL-P-4 10/08/02
SVOCs	**Units**										
Fluoranthene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Fluorene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Hexachlorobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Hexachlorobutadiene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Hexachlorocyclopentadiene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Hexachloroethane	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Indeno(1,2,3-cd)pyrene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Isophorone	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Naphthalene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Nitrobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
N-Nitroso-di-n-propylamine	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
N-Nitrosodiphenylamine	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Pentachlorophenol	ug/kg	5100 U	51 U	51 U	51 U	51 U	260 U	51 U	51 U	51 U	51 U
Phenanthrene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Phenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	360 J	990 U
Pyrene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Pesticides											
4,4'-DDD	ug/kg	9.9 U	9.9 U	9.9 U	9.9 U	2.4 J	9.9 U	20 U	9.9 U	9.9 U	9.9 U
4,4'-DDE	ug/kg	9.9 U	9.9 U	9.9 U	9.9 U	10 J	9.9 U	20 U	9.9 U	0.97 J	9.9 U
4,4'-DDT	ug/kg	2.6 J	1.3 J	9.9 U	9.9 U	9.9 U	9.9 U	20 U	9.9 U	1.4 J	9.9 U
Aldrin	ug/kg	5.1 U	5.1 U	5.1 U	5.1 U	5.1 J	5.1 U	1.1 J	5.1 U	0.5 J	0.67 J
alpha-BHC	ug/kg	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	1.2 J	5.1 U	5.1 U	5.1 U
alpha-Chlordane	ug/kg	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	10 U	5.1 U	0.93 J	5.1 U
beta-BHC	ug/kg	5.1 U	5.1 U	5.1 U	5.1 U	4.4 J	5.1 U	10 U	5.1 U	3.1 J	5.1 U
delta-BHC	ug/kg	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	1.2 J	5.1 U	5.1 U	5.1 U
Dieldrin	ug/kg	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	20 U	9.9 U	9.9 U	3.4 J
Endosulfan I	ug/kg	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	10 U	5.1 U	5.1 U	5.1 U
Endosulfan II	ug/kg	9.9 U	9.9 U	9.9 U	9.9 U	5.4 J	9.9 U	3.6 J	9.9 U	9.9 U	9.9 U
Endosulfan Sulfate	ug/kg	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	20 U	9.9 U	9.9 U	9.9 U
Endrin	ug/kg	9.9 U	9.9 U	9.9 U	9.9 U	2 J	9.9 U	20 U	9.9 U	9.9 U	9.9 U
Endrin Aldehyde	ug/kg	9.9 U	9.9 U	9.9 U	9.9 U	25 J	9.9 U	20 U	9.9 U	9.9 U	9.9 U
Endrin Ketone	ug/kg	9.9 U	9.9 UJ	9.9 UJ	9.9 UJ	2.2 J	9.9 UJ	20 UJ	9.9 UJ	9.9 UJ	2.6 J
gamma-BHC (Lindane)	ug/kg	5.1 U	0.77 J	3.3 J	2.9 J	9.8	5.1 U	2 J	2.1 J	5.1 U	5.1 U
gamma-Chlordane	ug/kg	5.1 U	5.1 U	5.1 U	5.1 U	5.7 J	5.1 U	3.4 J	5.1 U	5.1 U	1 J
Heptachlor	ug/kg	5.1 U	5.1 U	1.6 J	5.1 U	3.4 J	5.1 U	10 U	5.1 U	5.1 U	5.5
Heptachlor Epoxide	ug/kg	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	7.6 J	5.1 U	5.1 U	5.1 U
Methoxychlor	ug/kg	51 UJ	51 U	51 U	51 U	51 UJ	51 U	190 J	51 U	51 U	51 U
Toxaphene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	1000 U	510 U	510 U	510 U
Herbicides											
2,4-D	ug/kg	2500 U	34 J	58 J	25 U	32 J	110 J	44 J	25 U	42 J	68 J
2,4-DB	ug/kg	2500 U	25 U	460 J	25 U	25 U	1300 J	58 J	25 U	95 J	25 U
2,4,5-T	ug/kg	2500 U	25 U	33 J	25 U	25 U	120 U	25 U	25 U	18 J	37 J
2,4,5-TP (Silvex)	ug/kg	2500 U	25 U	25 U	25 U	25 U	120 U	25 U	25 U	25 U	87 J
Dalapon	ug/kg	600000 UJ	6000 U	6000 U	6000 U	6000 U	30000 U	6000 U	6000 U	6000 U	6000 U
Dicamba	ug/kg	6000 U	60 U	60 U	60 U	60 U	300 U	60 U	60 U	60 U	60 U
Dichlorprop	ug/kg	30000 U	300 U	300 U	170 J	180 J	1500 U	300 U	300 U	200 J	300 U
Dinoseb	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
MCPA	ug/kg	600000 U	6000 U	6000 U	6000 U	5700 J	30000 U	6000 U	6000 U	4800 J	6000 U
MCPP	ug/kg	600000 U	6000 U	6000 U	6000 U	6000 U	30000 U	6000 U	6000 U	8800 J	6000 U

NOTES:
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UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.

Table III-A6
Plant Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID	OFF SITE (Background)			SITE O			SITE P			
	Sample Date	PL-OS-2 10/08/02	PL-OS-3 10/08/02	PL-OS-4 10/08/02	PL-O-1 10/08/02	PL-O-2 10/08/02	PL-O-3 10/08/02	PL-P-1 10/08/02	PL-P-2 10/08/02	PL-P-3 10/08/02	PL-P-4 10/08/02
PCBs	**Units**										
Decachlorobiphenyl	ug/kg	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dichlorobiphenyl	ug/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Heptachlorobiphenyl	ug/kg	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Hexachlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Monochlorobiphenyl	ug/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nonachlorobiphenyl	ug/kg	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Octachlorobiphenyl	ug/kg	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Pentachlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Tetrachlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Trichlorobiphenyl	ug/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PCBs	ug/kg	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dioxins/Furans											
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	pg/g	1.2 U	1.9 U	1.5 U	190	17	1.6 U	12	3 J	9.6	2.1 U
1,2,3,4,6,7,8-HpCDF	pg/g	0.34 U	0.68 U	0.24 U	20	1.9 U	0.35 U	2.3 U	0.55 U	1.7 U	0.67 U
1,2,3,4,7,8,9-HpCDF	pg/g	0.12 U	0.11 U	0.09 U	0.63 U	0.11 U	0.11 U	0.14 U	0.13 U	0.14 U	0.09 U
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	0.18 UJ	0.15 UJ	0.15 UJ	2 U	0.22 U	0.16 UJ	0.25 U	0.19 U	0.2 U	0.19 U
1,2,3,4,7,8-HxCDF	pg/g	0.2 U	0.11 U	0.11 U	0.99 U	0.18 U	0.18 U	0.24 U	0.18 U	0.19 U	0.16 U
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	0.17 U	0.31 U	0.14 U	4.4 J	0.45 U	0.15 U	0.4 U	0.18 U	0.41 U	0.18 U
1,2,3,6,7,8-HxCDF	pg/g	0.11 U	0.1 U	0.1 U	0.43 U	0.14 U	0.12 U	0.22 U	0.16 U	0.17 U	0.15 U
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	pg/g	0.19 U	0.13 U	0.13 U	3.6 J	0.34 U	0.17 U	0.45 U	0.16 U	0.38 U	0.17 U
1,2,3,7,8,9-HxCDF	pg/g	0.13 U	0.13 U	0.12 U	0.35 U	0.17 U	0.15 U	0.27 U	0.2 U	0.21 U	0.18 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	0.16 U	0.12 U	0.14 U	0.22 U	0.16 U	0.17 U	0.2 U	0.18 U	0.17 U	0.16 U
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	pg/g	0.37 U	0.31 U	0.31 U	0.82 U	0.36 U	0.36 U	0.4 U	0.35 U	0.34 U	0.43 U
2,3,4,6,7,8-HxCDF	pg/g	0.12 U	0.12 U	0.11 U	0.72 U	0.16 U	0.14 U	0.25 U	0.18 U	0.2 U	0.17 U
2,3,4,7,8-PeCDF	pg/g	0.16 U	0.12 U	0.13 U	0.28 U	0.16 U	0.16 U	0.2 U	0.17 U	0.16 U	0.15 U
2,3,7,8-TCDD	pg/g	0.17 UJ	0.13 UJ	0.12 UJ	0.32 U	0.19 U	0.16 UJ	0.26 U	0.21 U	0.25 U	0.21 U
2,3,7,8-Tetrachlorodibenzofuran	pg/g	0.33 U	0.25 U	0.22 U	1.7	0.39 U	0.34 U	0.71 U	0.56 U	0.56 U	0.51 U
OCDD	pg/g	7.9 J	15	13	3800	270	13	120	38	120	31
OCDF	pg/g	0.56 U	1.4 U	0.27 U	85	7.4 J	0.58 U	9.7 J	2.7 U	8 J	2.3 U
Total HpCDD	pg/g	2 U	1.9 U	1.9 U	450	37	2.3 U	25	6	20	2.2 U
Total HpCDF	pg/g	0.34 U	0.76 U	0.24 U	54	3.6	0.65 U	3.9	0.96 U	3.4	0.93 U
Total HxCDD	pg/g	1.7 U	0.57 U	0.85 U	66	3.3	1.6 U	2 U	0.65 U	3.4	0.57 U
Total HxCDF	pg/g	0.25 U	0.14 U	0.15 U	8.9	0.66 U	0.34 U	0.93 U	0.2 U	0.74 U	0.18 U
Total PeCDD	pg/g	0.37 U	0.84 U	0.39 U	10	1 U	1 U	1.2 U	0.41 U	1.6 U	0.43 U
Total PeCDF	pg/g	0.29 U	0.21 U	0.17 U	1.7 U	0.37 U	0.24 U	0.7 U	0.3 U	0.69 U	0.3 U
Total TCDD	pg/g	0.32 UJ	2.8 J	0.29 UJ	3.3	0.23 U	0.16 UJ	0.58	0.21 U	0.96	0.31 U
Total TCDF	pg/g	0.33 U	0.25 U	0.22 U	0.59 J	0.39 U	0.34 U	0.71 U	0.56 U	0.56 U	0.51 U
Metals											
Aluminum	mg/kg	13 J	13 J	130	7.5 J	14 J	8.1 J	41	8.2 J	13 J	51
Antimony	mg/kg	2 U	2 U	2 U	1.8 U	1.8 U	2 U	0.52 J	2 U	1.8 U	2 U
Arsenic	mg/kg	1 U	1 U	1 U	0.91 U	0.91 U	1 U	1 U	0.41 J	0.91 U	1 U
Barium	mg/kg	8.5	8.9	15	2.5	7.6	5.1	4.7	3.9	5.3	5.4
Beryllium	mg/kg	0.4 U	0.4 U	0.4 U	0.36 U	0.36 U	0.4 U	0.4 U	0.4 U	0.36 U	0.4 U
Cadmium	mg/kg	0.55	0.12 J	0.5 U	0.2 J	0.13 J	0.13 J	0.55	0.25 J	0.28 J	0.17 J
Calcium	mg/kg	1900 J	1300 J	3200 J	1200 J	3600 J	1600 J	3000 J	1200 J	1800 J	1400 J
Chromium	mg/kg	0.29 J	0.18 J	0.51 J	0.21 J	0.91 U	0.31 J	0.41 J	0.35 J	0.19 J	0.3 J
Cobalt	mg/kg	1 U	1 U	1 U	0.91 U	0.91 U	1 U	1	1 U	0.91 U	1 U
Copper	mg/kg	4.6	4.6	2.7	3.5	4	4	6.9	3.7	4.4	4.8
Iron	mg/kg	38	32	260	24	42	28	100	35	39	110
Lead	mg/kg	1.4 J	0.46 J	0.92 J	0.75 J	1.4 J	0.65 J	4.7 J	1.2 J	2.2 J	5 J
Magnesium	mg/kg	480	560	1100	560	780	810	740	480	500	630
Manganese	mg/kg	20	3.9	12	12	11	10	6.1	7.9	6	7.5
Mercury	mg/kg	0.76	0.22	0.21	0.19	0.91	0.14	1	0.27	0.5	0.29
Nickel	mg/kg	4 U	4 U	4 U	3.6 U	3.6 U	4 U	3.9 J	4 U	3.6 U	4 U
Potassium	mg/kg	9600 J	5300 J	4900 J	3500 J	5800 J	3200 J	4600 J	4000 J	4500 J	3200 J
Selenium	mg/kg	1 U	1 U	1 U	0.91 U	0.91 U	1 U	12	1 U	0.43 J	1 U
Silver	mg/kg	1 U	1 U	1 U	0.91 U	0.91 U	1 U	1 U	1 U	0.91 U	1 U
Sodium	mg/kg	50 U	50 U	50 U	45 U	45 U	50 U	53 U	50 U	340	50 U
Thallium	mg/kg	1 U	1 U	1 U	0.91 U	0.91 U	1 U	1 U	1 U	0.91 U	1 U
Vanadium	mg/kg	1 U	1 U	0.47 J	0.91 U	0.91 U	1 U	0.36 J	1 U	0.91 U	0.25 J
Zinc	mg/kg	65 J	36 J	11 J	22 J	25 J	18 J	79 J	31 J	50 J	35 J

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Table III-A6
Plant Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date	SITE Q									
		PL-Q-9 10/09/02	PL-Q-10 10/09/02	PL-Q-11 10/09/02	PL-Q-12 10/09/02	PL-Q-21 (Dup of PL-Q-12) 10/09/02	PL-Q-13 10/09/02	PL-Q-14 10/09/02	PL-Q-15 10/09/02	PL-Q-16 10/09/02	PL-Q-17 10/09/02
SVOCs	**Units**										
1,2,4-Trichlorobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
1,2-Dichlorobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
1,3-Dichlorobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
1,4-Dichlorobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4,5-Trichlorophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4,6-Trichlorophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4-Dichlorophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4-Dimethylphenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4-Dinitrophenol	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
2,4-Dinitrotoluene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,6-Dinitrotoluene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Chloronaphthalene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Chlorophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Methylnaphthalene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Methylphenol (o-Cresol)	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Nitroaniline	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
2-Nitrophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
3,3'-Dichlorobenzidine	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
3-Nitroaniline	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
4,6-Dinitro-2-methylphenol	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
4-Bromophenyl Phenyl Ether	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
4-Chloro-3-methylphenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
4-Chloroaniline	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
4-Chlorophenyl Phenyl Ether	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
4-Nitroaniline	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
4-Nitrophenol	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
Acenaphthene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Acenaphthylene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Anthracene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(a)anthracene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(a)pyrene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(b)fluoranthene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(g,h,i)perylene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(k)fluoranthene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
bis(2-Chloroethoxy)methane	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
bis(2-Chloroethyl)ether	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
bis(2-Ethylhexyl)phthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Butyl Benzyl Phthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Carbazole	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Chrysene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Dibenzo(a,h)anthracene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Dibenzofuran	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Diethyl Phthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Dimethyl Phthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Di-n-butylphthalate	ug/kg	88 J	990 U	170 J	100 J	990 U	990 U	990 U	140 J	94 J	990 U
Di-n-octylphthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U

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Table III-A6
Plant Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date	SITE Q PL-Q-9 10/09/02	PL-Q-10 10/09/02	PL-Q-11 10/09/02	PL-Q-12 10/09/02	PL-Q-21 (Dup of PL-Q-12) 10/09/02	PL-Q-13 10/09/02	PL-Q-14 10/09/02	PL-Q-15 10/09/02	PL-Q-16 10/09/02	PL-Q-17 10/09/02
SVOCs	**Units**										
Fluoranthene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Fluorene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Hexachlorobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Hexachlorobutadiene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Hexachlorocyclopentadiene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Hexachloroethane	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Indeno(1,2,3-cd)pyrene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Isophorone	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Naphthalene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Nitrobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
N-Nitroso-di-n-propylamine	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
N-Nitrosodiphenylamine	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Pentachlorophenol	ug/kg	51 U	100 U	51 UJ	51 U	51 U	51 U	51 U	51 U	51 U	51 U
Phenanthrene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Phenol	ug/kg	990 U	320 J	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Pyrene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Pesticides											
4,4'-DDD	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	9.9 U	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ
4,4'-DDE	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	9.9 U	9.9 UJ	1.3 J	9.9 UJ	9.9 UJ
4,4'-DDT	ug/kg	4.1 J	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ	2 J	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ
Aldrin	ug/kg	5.1 UJ	5.1 UJ	5.1 UJ	5.1 U	5.1 U	5.1 U	1 J	5.1 UJ	5.1 UJ	5.1 UJ
alpha-BHC	ug/kg	5.1 UJ	0.62 J	5.1 UJ	0.87 J	5.1 U	0.83 J	5.1 UJ	5.1 UJ	3.5 J	3.7 J
alpha-Chlordane	ug/kg	5.1 UJ	5.1 UJ	5.1 UJ	5.1 U	5.1 U	5.1 U	5.1 UJ	5.1 UJ	5.1 UJ	5.1 UJ
beta-BHC	ug/kg	5.1 UJ	5.5 J	5.1 UJ	5.1 U	4.8 J	5.1 U	5.1 UJ	5.1 UJ	5.9 J	4.7 J
delta-BHC	ug/kg	5.1 UJ	1.7 J	5.1 UJ	5.1 U	5.1 U	0.29 J	5.1 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Dieldrin	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	9.9 U	9.9 UJ	1.2 J	2.1 J	9.9 UJ
Endosulfan I	ug/kg	5.1 UJ	5.1 UJ	5.1 UJ	5.1 U	5.1 U	5.1 U	5.1 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Endosulfan II	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	9.9 U	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ
Endosulfan Sulfate	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	9.9 U	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ
Endrin	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	9.9 U	9.9 UJ	1.3 J	9.9 UJ	9.9 UJ
Endrin Aldehyde	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	9.9 U	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ
Endrin Ketone	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	9.9 U	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ
gamma-BHC (Lindane)	ug/kg	5.1 UJ	1.6 J	0.74 J	5.1 U	5.1 U	5.1 U	0.25 J	5.1 UJ	5.1 UJ	5.1 UJ
gamma-Chlordane	ug/kg	2.2 J	5.1 UJ	5.1 UJ	5.1 U	5.1 U	5.1 U	5.1 UJ	0.71 J	5.1 UJ	5.1 UJ
Heptachlor	ug/kg	5.1 U	5.1 UJ	5.1 UJ	0.81 J	5.1 U	0.73 J	5.1 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Heptachlor Epoxide	ug/kg	1.7 J	5.1 UJ	5.1 UJ	5.1 U	5.1 U	5.1 U	5.1 UJ	5.1 UJ	5.1 UJ	5.1 UJ
Methoxychlor	ug/kg	51 UJ	51 UJ	51 UJ	51 U	51 U	51 U	51 UJ	2.8 J	51 UJ	51 UJ
Toxaphene	ug/kg	510 UJ	510 UJ	510 UJ	510 U	510 U	510 U	510 UJ	510 UJ	510 UJ	510 UJ
Herbicides											
2,4-D	ug/kg	37 J	160 J	20 J	25 U	58 J	68 J	25 U	49	25 U	42 J
2,4-DB	ug/kg	68	150 J	76 J	25 U	25 U	25 U	25 U	25 U	110	25 U
2,4,5-T	ug/kg	25 U	440 J	77 J	25 U	25 U	25 U	30	25 U	18 J	25 U
2,4,5-TP (Silvex)	ug/kg	25 U	40 J	25 UJ	25 U	25 U	25 U	24 J	25 U	25 U	25 U
Dalapon	ug/kg	6000 U	12000 UJ	6000 UJ	6000 U	6000 U	6000 U	6000 UJ	6000 U	6000 U	6000 U
Dicamba	ug/kg	60 U	120 U	60 UJ	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Dichlorprop	ug/kg	300 U	600 U	300 UJ	300 U	300 U	300 U	300 U	300 U	300 U	300 U
Dinoseb	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
MCPA	ug/kg	6000 U	12000 U	3200 J	6000 U	3000 J	6000 U	3300 J	6300 J	6800 J	6700
MCPP	ug/kg	6000 U	11000 J	6000 UJ	6000 U	6000 U	6000 U	6000 U	6000 U	6000 U	11000 J

NOTES:
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R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.

Table III-A6
Plant Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date	SITE Q PL-Q-9 10/09/02	PL-Q-10 10/09/02	PL-Q-11 10/09/02	PL-Q-12 10/09/02	PL-Q-21 (Dup of PL-Q-12) 10/09/02	PL-Q-13 10/09/02	PL-Q-14 10/09/02	PL-Q-15 10/09/02	PL-Q-16 10/09/02	PL-Q-17 10/09/02
PCBs	**Units**										
Decachlorobiphenyl	ug/kg	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dichlorobiphenyl	ug/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Heptachlorobiphenyl	ug/kg	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Hexachlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Monochlorobiphenyl	ug/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nonachlorobiphenyl	ug/kg	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Octachlorobiphenyl	ug/kg	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Pentachlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Tetrachlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Trichlorobiphenyl	ug/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PCBs	ug/kg	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dioxins/Furans											
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	pg/g	2.7 J	1.1 U	0.74 U	2.2 U	2.9 J	1.3 U	1 U	0.45 U	2.6 J	1.3 U
1,2,3,4,6,7,8-HpCDF	pg/g	0.37 U	0.22 U	0.15 U	0.44 U	0.58 U	0.17 U	0.22 U	0.1 U	0.53 U	0.24 U
1,2,3,4,7,8,9-HpCDF	pg/g	0.087 U	0.082 U	0.066 U	0.087 U	0.16 U	0.13 U	0.088 U	0.088 U	0.083 U	0.093 U
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	0.095 U	0.17 U	0.1 U	0.091 U	0.17 U	0.19 U	0.12 U	0.11 U	0.12 UJ	0.12 U
1,2,3,4,7,8-HxCDF	pg/g	0.15 U	0.2 U	0.094 U	0.17 U	0.29 U	0.14 U	0.085 U	0.093 U	0.16 U	0.1 U
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	0.13 U	0.17 U	0.1 U	0.16 U	0.33 U	0.18 U	0.11 U	0.1 U	0.16 U	0.11 U
1,2,3,6,7,8-HxCDF	pg/g	0.072 U	0.17 U	0.076 U	0.058 U	0.14 U	0.13 U	0.077 U	0.085 U	0.086 U	0.091 U
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	pg/g	0.1 U	0.27 U	0.09 U	0.079 U	0.24 U	0.17 U	0.12 U	0.093 U	0.21 U	0.11 U
1,2,3,7,8,9-HxCDF	pg/g	0.088 U	0.12 U	0.094 U	0.072 U	0.18 U	0.16 U	0.1 U	0.1 U	0.11 U	0.11 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	0.1 U	0.24 U	0.13 U	0.13 U	0.28 UJ	0.22 U	0.11 U	0.14 U	0.16 U	0.16 U
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	pg/g	0.2 U	0.29 U	0.18 U	0.17 U	0.48 U	0.36 U	0.17 U	0.22 U	0.26 U	0.27 U
2,3,4,6,7,8-HxCDF	pg/g	0.081 U	0.13 U	0.086 U	0.066 U	0.18 U	0.15 U	0.087 U	0.1 U	0.1 U	0.1 U
2,3,4,7,8-PeCDF	pg/g	0.1 U	0.23 U	0.12 U	0.12 U	0.27 UJ	0.21 U	0.1 U	0.14 U	0.16 U	0.16 U
2,3,7,8-TCDD	pg/g	0.1 U	0.12 U	0.1 U	0.1 U	0.27 UJ	0.19 U	0.11 U	0.17 U	0.14 UJ	0.14 U
2,3,7,8-Tetrachlorodibenzofuran	pg/g	0.2 U	0.25 UJ	0.19 U	0.22 U	0.47 UJ	0.35 UJ	0.21 U	0.32 U	0.29 U	0.24 UJ
OCDD	pg/g	28	8.9 J	13	24	30	13	9.1 J	3.3 U	26	11
OCDF	pg/g	1.1 U	0.41 U	0.33 U	0.89 U	1.3 U	0.62 U	0.29 U	0.15 U	0.86 U	0.52 U
Total HpCDD	pg/g	5.8	1.8 U	0.83 U	2.3 U	6.2	1.6 U	1.3 U	0.55 U	6.4	1.9 U
Total HpCDF	pg/g	0.37 U	0.22 U	0.15 U	0.6 U	0.64 U	0.23 U	0.22 U	0.1 U	0.56 U	0.32 U
Total HxCDD	pg/g	0.34 U	0.17 U	0.26 U	0.48 U	0.72 U	0.44 U	0.57 U	0.24 U	1 U	0.59 U
Total HxCDF	pg/g	0.15 U	0.11 U	0.094 U	0.17 U	0.29 U	0.16 U	0.1 U	0.1 U	0.28 U	0.11 U
Total PeCDD	pg/g	0.2 U	0.29 U	0.18 U	0.2 U	0.48 U	0.36 U	0.17 U	0.23 U	0.47 U	0.27 U
Total PeCDF	pg/g	0.18 U	0.24 U	0.17 U	0.19 U	0.39 UJ	0.28 U	0.18 U	0.25 U	0.35 U	0.2 U
Total TCDD	pg/g	0.1 U	0.12 U	0.1 U	0.1 U	0.27 UJ	0.19 U	0.11 U	0.17 U	0.17 UJ	0.14 U
Total TCDF	pg/g	0.2 U	0.25 UJ	0.19 U	0.24 U	0.47 UJ	0.35 UJ	0.21 U	0.32 U	0.29 U	0.24 UJ
Metals											
Aluminum	mg/kg	55	7.3 J	31	19 J	75	29	13 J	9.6 J	32	11 J
Antimony	mg/kg	2 U	2 U	2 U	2 U	1.8 U	1.8 U	1.7 U	2 U	2 U	1.8 U
Arsenic	mg/kg	1 U	1 U	1 U	1 U	0.91 U	0.91 U	0.83 U	1 U	1 U	0.91 U
Barium	mg/kg	12	8.7	2.6	3.9	6.6	4.6	4.8	2.5	22	13
Beryllium	mg/kg	0.4 U	0.4 U	0.4 U	0.4 U	0.36 U	0.36 U	0.33 U	0.4 U	0.4 U	0.36 U
Cadmium	mg/kg	0.23 J	0.28 J	0.071 J	0.11 J	0.15 J	0.25 J	0.098 J	0.14 J	0.13 J	0.45 U
Calcium	mg/kg	2500 J	2000 J	1500 J	1400 J	1500 J	1600 J	2100 J	2400 J	3700 J	5600 J
Chromium	mg/kg	0.24 J	1 U	0.83 J	1 U	0.46 J	0.91 U	0.17 J	1 U	1 U	0.91 U
Cobalt	mg/kg	1 U	1 U	1 U	1 U	0.91 U	0.91 U	0.83 U	1 U	1 U	0.91 U
Copper	mg/kg	6.8	3.7	3.3	2.5	2.7	2.5	2.9	8.7	6.7	1.2 J
Iron	mg/kg	100	33	66	43	130	61	39	30	69	26
Lead	mg/kg	0.77	0.39 J	1.1	0.52	0.76	0.55	0.89	0.39 J	1.2	0.52
Magnesium	mg/kg	1600	920	550	820	820	770	790	830	840	650
Manganese	mg/kg	8.9	4.6	23	6.6	12	11	7	5.7	29	6.6
Mercury	mg/kg	0.63 J	0.28 J	0.22 J	0.26 J	0.41 J	0.27 J	1.3 J	0.53 J	0.79 J	0.097 J
Nickel	mg/kg	4 U	4 U	4 U	4 U	3.6 U	3.6 U	3.3 U	4 U	4 U	3.6 U
Potassium	mg/kg	7300	4300	3800	10000	7200	6900	2800	8100	7300	6400
Selenium	mg/kg	1 U	1 U	1 U	0.59 J	0.65 J	0.47 J	0.83 U	1 U	0.59 J	0.91 U
Silver	mg/kg	1 U	1 U	1 U	1 U	0.91 U	0.91 U	0.83 U	1 U	1 U	0.91 U
Sodium	mg/kg	50 U	50 U	50 U	50 U	45 U	45 U	41 U	50 U	50 U	45 U
Thallium	mg/kg	1 U	1 U	1 U	1 U	0.91 U	0.91 U	0.83 U	1 U	1 U	0.91 U
Vanadium	mg/kg	1 U	1 U	1 U	1 U	0.91 U	0.91 U	0.83 U	1 U	1 U	0.91 U
Zinc	mg/kg	24	42	20	13	17	30	28	35	34	7

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Table III-A6
Plant Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID / Sample Date	SITE Q			SITE R					SITE S
		PL-Q-18 10/09/02	PL-Q-19 10/09/02	PL-Q-20 10/09/02	PL-R-1 10/08/02	PL-R-2 10/08/02	PL-R-3 10/08/02	PL-R-4 10/08/02	PL-R-5 10/08/02	PL-S-1 10/08/02
SVOCs	**Units**									
1,2,4-Trichlorobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
1,2-Dichlorobenzene	ug/kg	990 U	990 U	990 U	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ
1,3-Dichlorobenzene	ug/kg	990 U	990 U	990 U	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ
1,4-Dichlorobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4,5-Trichlorophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4,6-Trichlorophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4-Dichlorophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,4-Dimethylphenol	ug/kg	990 U	990 U	990 U	990 R	990 R	990 R	990 R	990 R	990 R
2,4-Dinitrophenol	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 UJ	5100 U	5100 UJ	5100 U
2,4-Dinitrotoluene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2,6-Dinitrotoluene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Chloronaphthalene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Chlorophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Methylnaphthalene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
2-Methylphenol (o-Cresol)	ug/kg	990 U	990 U	990 U	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ
2-Nitroaniline	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
2-Nitrophenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
3,3'-Dichlorobenzidine	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	990 U	990 U	990 U	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ	990 UJ
3-Nitroaniline	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
4,6-Dinitro-2-methylphenol	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
4-Bromophenyl Phenyl Ether	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
4-Chloro-3-methylphenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
4-Chloroaniline	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
4-Chlorophenyl Phenyl Ether	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
4-Nitroaniline	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
4-Nitrophenol	ug/kg	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U	5100 U
Acenaphthene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Acenaphthylene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Anthracene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(a)anthracene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(a)pyrene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(b)fluoranthene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(g,h,i)perylene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Benzo(k)fluoranthene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
bis(2-Chloroethoxy)methane	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
bis(2-Chloroethyl)ether	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
bis(2-Ethylhexyl)phthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	82 J
Butyl Benzyl Phthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Carbazole	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Chrysene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Dibenzo(a,h)anthracene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Dibenzofuran	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Diethyl Phthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Dimethyl Phthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Di-n-butylphthalate	ug/kg	990 U	990 U	170 J	990 U	990 U	990 U	990 U	89 J	990 U
Di-n-octylphthalate	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U

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J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.

Table III-A6
Plant Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date	SITE Q PL-Q-18 10/09/02	 PL-Q-19 10/09/02	 PL-Q-20 10/09/02	SITE R PL-R-1 10/08/02	 PL-R-2 10/08/02	 PL-R-3 10/08/02	 PL-R-4 10/08/02	 PL-R-5 10/08/02	SITE S PL-S-1 10/08/02
SVOCs	**Units**									
Fluoranthene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Fluorene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Hexachlorobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Hexachlorobutadiene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Hexachlorocyclopentadiene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Hexachloroethane	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Indeno(1,2,3-cd)pyrene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Isophorone	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Naphthalene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Nitrobenzene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
N-Nitroso-di-n-propylamine	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
N-Nitrosodiphenylamine	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Pentachlorophenol	ug/kg	100 U	51 U	51 U	51 U	51 U	51 U	51 U	51 U	51 U
Phenanthrene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Phenol	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Pyrene	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
Pesticides										
4,4'-DDD	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	1.1 J	9.9 U	9.9 U	9.9 U
4,4'-DDE	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
4,4'-DDT	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	1.6 J	1.5 J	9.9 U	2.3 J	2.2 J	1.5 J
Aldrin	ug/kg	5.1 UJ	5.1 UJ	5.1 UJ	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
alpha-BHC	ug/kg	2.7 J	1.3 J	1.7 J	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
alpha-Chlordane	ug/kg	2.7 J	1.6 J	5.1 UJ	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
beta-BHC	ug/kg	2.2 J	5.1 UJ	5.1 UJ	2.8 J	5.2 J	5.1 U	4.4 J	1.9 J	5.1 U
delta-BHC	ug/kg	5.1 UJ	5.1 UJ	5.1 UJ	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Dieldrin	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	0.92 J	2.1 J	2.9 J	1.6 J	2.7 J	9.9 U
Endosulfan I	ug/kg	5.1 UJ	5.1 UJ	5.1 UJ	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Endosulfan II	ug/kg	9.9 UJ	1.4 J	9.9 UJ	2.6 J	2.5 J	9.9 U	2 J	2.7 J	9.9 U
Endosulfan Sulfate	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	1.4 J	9.9 U	2 J	9.9 U
Endrin	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
Endrin Aldehyde	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
Endrin Ketone	ug/kg	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ	9.9 UJ
gamma-BHC (Lindane)	ug/kg	0.29 J	1.2 J	5.1 UJ	0.79 J	5.1 U	0.99 J	5.1 U	1.7 J	5.8 J
gamma-Chlordane	ug/kg	5.1 UJ	2.9 J	5.1 UJ	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Heptachlor	ug/kg	5.1 UJ	5.1 U	5.1 U	5.1 U	2.3 J	2.3 J	2.4 J	1.4 J	5.1 U
Heptachlor Epoxide	ug/kg	5.1 UJ	5.1 UJ	5.1 UJ	5.1 U	0.52 J	5.1 U	5.1 U	5.1 U	5.1 U
Methoxychlor	ug/kg	51 UJ	51 UJ	51 UJ	51 U	51 U	51 U	51 U	51 U	51 U
Toxaphene	ug/kg	510 UJ	510 UJ	510 UJ	510 U	510 U	510 U	510 U	510 U	510 U
Herbicides										
2,4-D	ug/kg	50 U	76 J	130	34 J	26 J	59	64	44	25 U
2,4-DB	ug/kg	560 J	110	210	25 U	53 J	35 J	87 J	25 U	25 U
2,4,5-T	ug/kg	36 J	19 J	25 U	25 U	25 U	25 U	25 U	25 U	25 U
2,4,5-TP (Silvex)	ug/kg	25 J	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dalapon	ug/kg	12000 U	6000 U	6000 U	6000 U	6000 U	6000 U	6000 U	6000 U	6000 U
Dicamba	ug/kg	120 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Dichlorprop	ug/kg	600 U	300 U	300 U	300 U	300 U	300 U	300 U	300 U	300 U
Dinoseb	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
MCPA	ug/kg	14000 J	7700	8100	4800 J	6000 U	6000 U	6000 U	6000 U	5100 J
MCPP	ug/kg	10000 J	6000 U	6000 U	6000 U	6000 U	6000 U	6000 U	6000 U	6000 U

NOTES:
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UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
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Table III-A6
Plant Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID / Sample Date	SITE Q			SITE R					SITE S
		PL-Q-18 10/09/02	PL-Q-19 10/09/02	PL-Q-20 10/09/02	PL-R-1 10/08/02	PL-R-2 10/08/02	PL-R-3 10/08/02	PL-R-4 10/08/02	PL-R-5 10/08/02	PL-S-1 10/08/02
PCBs	**Units**									
Decachlorobiphenyl	ug/kg	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dichlorobiphenyl	ug/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Heptachlorobiphenyl	ug/kg	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Hexachlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Monochlorobiphenyl	ug/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nonachlorobiphenyl	ug/kg	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Octachlorobiphenyl	ug/kg	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Pentachlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Tetrachlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Trichlorobiphenyl	ug/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PCBs	ug/kg	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dioxins/Furans										
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	pg/g	1.5 U	3 J	2.5 J	2 U	1.5 U	9.3	1.7 U	29	1.9 U
1,2,3,4,6,7,8-HpCDF	pg/g	0.31 U	0.71 U	0.43 U	0.41 U	0.29 U	1.1 U	0.39 U	2.8 J	0.31 U
1,2,3,4,7,8,9-HpCDF	pg/g	0.1 U	0.092 U	0.1 U	0.1 U	0.08 U	0.19 U	0.1 U	0.14 U	0.12 U
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	0.12 U	0.13 U	0.13 U	0.15 UJ	0.15 UJ	0.39 UJ	0.17 UJ	0.95 UJ	0.14 UJ
1,2,3,4,7,8-HxCDF	pg/g	0.14 U	0.11 U	0.11 U	0.13 U	0.12 U	0.43 U	0.15 U	0.32 U	0.11 U
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	0.13 U	0.23 U	0.2 U	0.18 U	0.14 U	0.66 U	0.16 U	1.6 U	0.13 U
1,2,3,6,7,8-HxCDF	pg/g	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.21 U	0.14 U	0.19 U	0.1 U
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	pg/g	0.17 U	0.18 U	0.27 U	0.15 U	0.13 U	0.68 U	0.15 U	1.5 U	0.15 U
1,2,3,7,8,9-HxCDF	pg/g	0.15 U	0.12 U	0.12 U	0.12 U	0.13 U	0.15 U	0.17 U	0.21 U	0.13 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	0.19 U	0.16 U	0.11 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.14 U
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	pg/g	0.33 U	0.25 U	0.19 U	0.28 U	0.27 U	0.29 U	0.36 U	0.79 U	0.35 U
2,3,4,6,7,8-HxCDF	pg/g	0.14 U	0.11 U	0.11 U	0.11 U	0.12 U	0.21 U	0.16 U	0.19 U	0.12 U
2,3,4,7,8-PeCDF	pg/g	0.18 U	0.15 U	0.1 U	0.14 U	0.12 U	0.21 U	0.15 U	0.16 U	0.13 U
2,3,7,8-TCDD	pg/g	0.21 UJ	0.16 UJ	0.1 U	0.12 UJ	0.16 UJ	0.13 UJ	0.17 UJ	0.25 UJ	0.18 UJ
2,3,7,8-Tetrachlorodibenzofuran	pg/g	0.37 UJ	0.23 UJ	0.31 U	0.29 U	0.31 U	0.36 U	0.32 U	0.32 U	0.3 U
OCDD	pg/g	11	31	19	18	12	99	13	340	20
OCDF	pg/g	0.49 U	1.4 U	0.87 U	0.59 U	0.56 U	2.9 U	0.6 U	10	0.92 U
Total HpCDD	pg/g	1.9 U	6.7	5.4	2.9	1.8 U	20	2.5 U	68	1.9 U
Total HpCDF	pg/g	0.31 U	0.98 U	0.73 U	0.41 U	0.38 U	1.2 U	0.39 U	7.8	0.51 U
Total HxCDD	pg/g	0.77 U	0.8 U	1.1 U	1 U	0.77 U	5.3	1.3 U	17	0.66 U
Total HxCDF	pg/g	0.17 U	0.26 U	0.15 U	0.28 U	0.15 U	0.43 U	0.17 U	2.1 U	0.13 U
Total PeCDD	pg/g	0.33 U	0.25 U	0.19 U	0.39 U	0.37 U	1.1 U	0.64 U	2.4 U	0.35 U
Total PeCDF	pg/g	0.3 U	0.22 U	0.29 U	0.26 U	0.3 U	0.66 U	0.29 U	0.52 U	0.26 U
Total TCDD	pg/g	0.21 UJ	0.16 UJ	0.1 U	0.13 UJ	0.42 UJ	0.32 UJ	0.35 UJ	0.47 UJ	0.22 UJ
Total TCDF	pg/g	0.37 UJ	0.23 UJ	0.31 U	0.29 U	0.31 U	0.36 U	0.32 U	0.32 U	0.3 U
Metals										
Aluminum	mg/kg	14 J	32	20	25	14 J	37	12 J	27	9.5 J
Antimony	mg/kg	2 U	2 U	1.8 U	1.8 U	1.8 U	1.8 U	2 U	1.8 U	2 U
Arsenic	mg/kg	1 U	1 U	0.91 U	0.91 U	0.91 U	0.91 U	1 U	0.91 U	1 U
Barium	mg/kg	8.7	32	25	7.8	13	7.1	8.2	11	5.4
Beryllium	mg/kg	0.4 U	0.4 U	0.36 U	0.36 U	0.36 U	0.36 U	0.4 U	0.36 U	0.4 U
Cadmium	mg/kg	0.22 J	0.12 J	0.059 J	0.35 J	0.2 J	0.12 J	0.089 J	0.23 J	0.5 U
Calcium	mg/kg	2200 J	4300 J	4400 J	2100 J	1700 J	1600 J	1800 J	1400 J	1800 J
Chromium	mg/kg	0.19 J	1 U	0.17 J	0.26 J	0.5 J	0.21 J	0.18 J	0.24 J	0.24 J
Cobalt	mg/kg	1 U	1 U	0.91 U	0.91 U	0.91 U	0.91 U	1 U	0.91 U	1 U
Copper	mg/kg	2.2	4.5	1.8 J	2.5	3.5	2.5	2.8	2.8	3.8
Iron	mg/kg	41	67	52	48	38	72	38	60	37
Lead	mg/kg	0.55	0.77	1	7.6 J	4.2 J	2.5 J	2.1 J	3.4 J	0.99 J
Magnesium	mg/kg	920	1300	940	1200	930	1000	930	740	770
Manganese	mg/kg	8.8	22	20	8.7	8.4	9.7	6.7	9.3	6.7
Mercury	mg/kg	0.3 J	0.2 J	0.44 J	1.1	0.91	1.3	2.5	2.1	1.3
Nickel	mg/kg	4 U	4 U	3.6 U	3.6 U	3.6 U	3.6 U	4 U	3.6 U	2.6 J
Potassium	mg/kg	3800	5500	6800	6400 J	6200 J	5300 J	7100 J	6400 J	4000 J
Selenium	mg/kg	1 U	0.67 J	0.91 U	0.91 U	0.91 U	0.91 U	1 U	0.91 U	1 U
Silver	mg/kg	1 U	1 U	0.91 U	0.91 U	0.91 U	0.91 U	1 U	0.91 U	1 U
Sodium	mg/kg	50 U	50 U	50 U	45 U	45 U	45 U	50 U	45 U	50 U
Thallium	mg/kg	1 U	1 U	0.91 U	0.91 U	0.91 U	0.91 U	1 U	0.91 U	1 U
Vanadium	mg/kg	1 U	1 U	0.91 U	0.91 U	0.91 U	0.91 U	1 U	0.91 U	1 U
Zinc	mg/kg	20	24	14	26 J	44 J	20 J	17 J	25 J	17 J

NOTES:
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Table III-A7
Earthworm Tissue Analyte Concentrations
Sauget, IL

Analyte		CONTROL	OFF SITE (Background)			SITE O			SITE P			
	Site	NA	OS-2	OS-3	OS-4	O-1	O-2	O-3	P-1	P-2	P-3	P-4
	Sample ID	#30	#22	#14	#15	#8	#10	#18	#2	#6	#7	#24
	Sample Date	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02
	Percent Lipids	3.3	11	3.6	3.2	5.4	9.2	8.0	1.6	3.4	3.0	5.8
SVOCs	**Units**											
1,2,4-Trichlorobenzene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
1,2-Dichlorobenzene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
1,3-Dichlorobenzene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
1,4-Dichlorobenzene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
2,4,5-Trichlorophenol	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
2,4,6-Trichlorophenol	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
2,4-Dichlorophenol	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
2,4-Dimethylphenol	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
2,4-Dinitrophenol	ug/kg	5100 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	5100 U	10000 U	5100 U	10000 U
2,4-Dinitrotoluene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
2,6-Dinitrotoluene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
2-Chloronaphthalene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
2-Chlorophenol	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
2-Methylnaphthalene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
2-Methylphenol (o-Cresol)	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
2-Nitroaniline	ug/kg	5100 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	5100 U	10000 U	5100 U	10000 U
2-Nitrophenol	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
3,3'-Dichlorobenzidine	ug/kg	2000 U	4000 U	4000 U	4000 U	4000 U	4000 U	4000 U	2000 U	4000 U	2000 U	4000 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
3-Nitroaniline	ug/kg	5100 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	5100 U	10000 U	5100 U	10000 U
4,6-Dinitro-2-methylphenol	ug/kg	5100 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	5100 U	10000 U	5100 U	10000 U
4-Bromophenyl Phenyl Ether	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
4-Chloro-3-methylphenol	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
4-Chloroaniline	ug/kg	2000 U	4000 U	4000 U	4000 U	4000 U	4000 U	4000 U	2000 U	4000 U	2000 U	4000 U
4-Chlorophenyl Phenyl Ether	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
4-Nitroaniline	ug/kg	5100 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	5100 U	10000 U	5100 U	10000 U
4-Nitrophenol	ug/kg	5100 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	5100 U	10000 U	5100 U	10000 U
Acenaphthene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Acenaphthylene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Anthracene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Benzo(a)anthracene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Benzo(a)pyrene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	230 J	2000 U	990 U	2000 U
Benzo(b)fluoranthene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	230 J	2000 U	990 U	2000 U
Benzo(g,h,i)perylene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Benzo(k)fluoranthene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	240 J	2000 U	990 U	2000 U
bis(2-Chloroethoxy)methane	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
bis(2-Chloroethyl)ether	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
bis(2-Ethylhexyl)phthalate	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Butyl Benzyl Phthalate	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Carbazole	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Chrysene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	120 J	2000 U	990 U	2000 U
Dibenzo(a,h)anthracene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Dibenzofuran	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Diethyl Phthalate	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Dimethyl Phthalate	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Di-n-butylphthalate	ug/kg	990 U	300 J	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Di-n-octylphthalate	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U

NOTES:
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NA - Not applicable

Table III-A7
Earthworm Tissue Analyte Concentrations
Sauget, IL

Analyte	Site	CONTROL	OFF SITE (Background)			SITE O			SITE P			
	Sample ID	NA	OS-2	OS-3	OS-4	O-1	O-2	O-3	P-1	P-2	P-3	P-4
	Sample Date	#30	#22	#14	#15	#8	#10	#18	#2	#6	#7	#24
	Percent Lipids	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02
		3.3	11	3.6	3.2	5.4	9.2	8.0	1.6	3.4	3.0	5.8
SVOCs	**Units**											
Fluoranthene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Fluorene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Hexachlorobenzene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Hexachlorobutadiene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Hexachlorocyclopentadiene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Hexachloroethane	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Indeno(1,2,3-cd)pyrene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Isophorone	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Naphthalene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Nitrobenzene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
N-Nitroso-di-n-propylamine	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
N-Nitrosodiphenylamine	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Pentachlorophenol	ug/kg	6.5 J	11 J	7.6 J	200 U	1400 J	48 J	170 J	11 J	17 J	100 U	11 J
Phenanthrene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Phenol	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Pyrene	ug/kg	990 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	990 U	2000 U	990 U	2000 U
Pesticides												
4,4'-DDD	ug/kg	20 U	40 U	40 U	40 U	140 J	40 U	40 U	20 U	40 U	20 U	40 U
4,4'-DDE	ug/kg	20 U	21 J	8.6 J	40 U	40 U	40 U	40 U	20 U	3.5 J	20 U	40 U
4,4'-DDT	ug/kg	20 U	58 J	29 J	40 U	1200 J	26 J	620 J	20 U	12 J	4.2 J	220 J
Aldrin	ug/kg	10 U	20 U	20 U	20 U	21 J	20 U	5.9 J	10 U	20 U	10 U	20 U
alpha-BHC	ug/kg	10 U	20 U	20 U	20 U	20 U	20 U	20 U	10 U	20 U	10 U	20 U
alpha-Chlordane	ug/kg	10 U	20 U	20 U	20 U	20 U	20 U	20 U	10 U	20 U	10 U	20 U
beta-BHC	ug/kg	10 U	20 U	20 U	20 U	20 U	20 U	20 U	10 U	20 U	10 U	20 U
delta-BHC	ug/kg	10 U	20 U	20 U	2.3 J	51 J	20 U	20 U	4.5 J	4.1 J	4.5 J	20 U
Dieldrin	ug/kg	20 U	5.2 J	40 U	40 U	110 J	26 J	400	2.1 J	6.9 J	20 U	65 J
Endosulfan I	ug/kg	10 U	20 U	1.9 J	20 U	20 U	20 U	1.9 J	10 U	20 U	10 U	20 U
Endosulfan II	ug/kg	20 U	40 U	40 U	40 U	39 J	40 U	40 U	20 U	40 U	20 U	40 U
Endosulfan Sulfate	ug/kg	20 U	40 U	40 U	40 U	40 U	18 J	40 U	20 U	10 J	4.2 J	40 U
Endrin	ug/kg	20 U	40 U	40 U	40 U	40 U	58 J	40 U	20 U	40 U	17 J	40 U
Endrin Aldehyde	ug/kg	20 U	40 U	40 U	4.2 J	40 U	40 U	40 U	20 U	40 U	20 U	40 U
Endrin Ketone	ug/kg	20 U	40 U	40 U	40 U	40 U	40 U	40 U	20 U	40 U	20 U	8 J
gamma-BHC (Lindane)	ug/kg	10 U	20 U	20 U	20 U	18 J	20 U	20 U	10 U	20 U	10 U	20 U
gamma-Chlordane	ug/kg	10 U	4.4 J	5.1 J	4.8 J	20 U	20 U	20 U	10 U	20 U	10 U	20 U
Heptachlor	ug/kg	1.3 J	20 U	20 U	20 U	20 U	20 U	20 U	10 U	20 U	10 U	5.4 J
Heptachlor Epoxide	ug/kg	10 U	20 U	20 U	20 U	20 U	20 U	20 U	10 U	7.8 J	10 U	20 U
Methoxychlor	ug/kg	100 U	17 J	200 U	200 U	200 U	200 U	200 U	10 J	50 J	15 J	18 J
Toxaphene	ug/kg	1000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	1000 U	2000 U	1000 U	2000 U
Herbicides												
2,4-D	ug/kg	25 U	50 U	50 U	100 U	94 J	50 U	56 J	50 U	630	50 U	150 J
2,4-DB	ug/kg	25 U	50 U	50 U	100 U	100 U	50 U	25 U	50 U	50 U	50 U	50 U
2,4,5-T	ug/kg	25 U	26 J	50 U	100 U	100 U	50 U	7.6 J	50 U	50 U	50 U	50 U
2,4,5-TP (Silvex)	ug/kg	25 U	9.4 J	50 U	100 U	100 U	50 U	6.1 J	50 U	50 U	50 U	50 U
Dalapon	ug/kg	6000 U	12000 U	12000 U	24000 U	24000 U	12000 U	6000 U	12000 U	12000 U	12000 U	12000 U
Dicamba	ug/kg	60 U	120 U	120 U	240 U	240 U	120 U	60 U	120 U	120 U	120 U	120 U
Dichlorprop	ug/kg	300 U	600 U	600 U	1200 U	1200 U	600 U	300 U	600 U	600 U	600 U	120 J
Dinoseb	ug/kg	990 U	2000 U	2000 UJ	2000 U	2000 UJ	2000 UJ	2000 U	990 UJ	2000 UJ	990 UJ	2000 U
MCPA	ug/kg	28000 J	41000 J	74000 J	27000 J	40000 J	58000 J	6000 U	29000 J	90000 J	43000 J	75000
MCPP	ug/kg	6000 U	12000 U	12000 U	24000 U	24000 U	12000 U	6000 U	12000 U	12000 U	12000 U	12000 U

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Table III-A7
Earthworm Tissue Analyte Concentrations
Sauget, IL

Analyte		CONTROL	OFF SITE (Background)			SITE O			SITE P			
	Site	NA	OS-2	OS-3	OS-4	O-1	O-2	O-3	P-1	P-2	P-3	P-4
	Sample ID	#30	#22	#14	#15	#8	#10	#18	#2	#6	#7	#24
	Sample Date	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02
	Percent Lipids	3.3	11	3.6	3.2	5.4	9.2	8.0	1.6	3.4	3.0	5.8
PCBs	**Units**											
Decachlorobiphenyl	ug/kg	50 U	100 U	100 U	100 U	100 U	100 U	100 U	50 U	100 U	50 U	100 U
Dichlorobiphenyl	ug/kg	10 U	20 U	20 U	20 U	1500	20 U	220	10 U	20 U	10 U	20 U
Heptachlorobiphenyl	ug/kg	30 U	60 U	60 U	60 U	390	60 U	1300	30 U	60 U	30 U	60 U
Hexachlorobiphenyl	ug/kg	20 U	40 U	22 J	40 U	1300	20 J	3700	20 U	40 U	20 U	60
Monochlorobiphenyl	ug/kg	10 U	20 U	20 U	20 U	20 U	20 U	20 U	10 U	20 U	10 U	20 U
Nonachlorobiphenyl	ug/kg	50 U	100 U	100 U	100 U	100 U	100 U	100 U	50 U	100 U	50 U	100 U
Octachlorobiphenyl	ug/kg	30 U	60 U	60 U	60 U	24 J	60 U	200	30 U	60 U	30 U	60 U
Pentachlorobiphenyl	ug/kg	20 U	40 U	40 U	40 U	6300	160	8200	20 U	40 U	20 U	110
Tetrachlorobiphenyl	ug/kg	20 U	40 U	40 U	40 U	14000	320	13000	20 U	40 U	9 J	40 U
Trichlorobiphenyl	ug/kg	10 U	20 U	20 U	20 U	9100	62	2400	10 U	20 U	10 U	20 U
Total PCBs	ug/kg	50 U	100 U	22	100 U	32614	562	29020	50 U	100 U	9.0	170
Dioxins/Furans												
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	pg/g	54	170	110	51	74000	1600	36000	17	2200	190	50
1,2,3,4,6,7,8-HpCDF	pg/g	0.94 U	33	24	25	7100	250	4900	2.5 U	230	40	13
1,2,3,4,7,8,9-HpCDF	pg/g	1.3 U	2.5 U	1.1 U	1.4 U	400 J	19	300 J	0.86 U	14	1.4 U	1.4 U
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	2.3 U	2.2 U	0.98 U	1.2 U	140 J	7 J	110 J	0.85 U	7.1 J	0.98 U	1.9 U
1,2,3,4,7,8-HxCDF	pg/g	0.74 U	5.3 J	1.9 U	0.75 UJ	300	14	240	0.43 U	5 J	4.2 U	2.8 U
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	3.9 U	5.3 J	14	19	1200	59	1500	0.77 U	45	3.4 U	2.1 U
1,2,3,6,7,8-HxCDF	pg/g	0.63 U	2.5 U	0.91 UJ	0.64 UJ	49 J	3.4 U	48 J	0.36 UJ	2.1 UJ	0.86 UJ	0.67 U
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	pg/g	11	3.5 U	3.2 U	2.7 U	230	15	210	0.77 U	19	1.5 U	1.7 U
1,2,3,7,8,9-HxCDF	pg/g	0.87 U	1 U	0.52 U	0.88 UJ	1.9 U	1.4 U	2 U	0.5 U	0.97 U	0.44 U	0.93 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	1.2 U	1.8 U	0.44 U	0.42 U	60	2.2 U	100	0.64 U	0.79 U	0.67 U	1.4 U
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	pg/g	3.1 U	2.3 U	1 U	0.76 U	31	1.9 U	56	1.1 U	5.3 J	1.1 U	2.3 U
2,3,4,6,7,8-HxCDF	pg/g	0.74 U	1.4 U	0.44 U	0.75 UJ	51	9.7 J	36	0.43 U	1.7 U	0.38 U	0.79 U
2,3,4,7,8-PeCDF	pg/g	1.2 U	1.6 U	0.44 U	0.42 U	170	3.5 U	220	0.63 U	0.78 U	0.66 U	1.4 U
2,3,7,8-TCDD	pg/g	0.82 U	1 J	0.37 U	0.31 U	31	2.5	84	0.53 U	1.3 J	0.55 U	0.87 U
2,3,7,8-Tetrachlorodibenzofuran	pg/g	0.65 U	2.5	0.91 U	0.26 U	180 J	7.6	450 J	0.38 U	0.73 U	0.42 U	1.6 J
OCDD	pg/g	1700	2500	1000	240	1300000 J	23000	450000 J	250	51000	2400	600
OCDF	pg/g	1.4 U	130	62	27	100000	1100	21000	16 J	1800	300	60
Total HpCDD	pg/g	130	340	220	89	150000	3300	71000	34	4500	350	94
Total HpCDF	pg/g	1.3 U	100	65	61	39000	1300	24000	6.6	1200	140	44
Total HxCDD	pg/g	60	38	73	71	5300	130	4600	0.85 U	190	6	6.1
Total HxCDF	pg/g	0.87 U	27	16	5.7 J	5500	210	5100	0.67 U	150	8.5	12
Total PeCDD	pg/g	12	7.1	31	4.9 U	2300	14	840	1.1 U	5.3	1.1 U	2.3 U
Total PeCDF	pg/g	1.2 U	8	2 U	0.48 U	1600	5.6	1900	0.66 U	7.7	0.67 U	3.5
Total TCDD	pg/g	8	19	110	9	760	7.8	580	0.53 U	28	0.96 U	3.8
Total TCDF	pg/g	0.65 U	34	3.3	0.26 U	3200 J	38	4200 J	0.38 U	3.8	0.42 U	10
Metals												
Aluminum	mg/kg	230	1200	420 J	220 J	520 J	850 J	960 J	1600 J	660 J	510 J	680
Antimony	mg/kg	2 U	0.42 J	1.8 U	2 U	2 U	2 U	2 U	0.47 J	1.8 U	0.52 J	2 UJ
Arsenic	mg/kg	2.8	5.9	5.5	5.9	5.4	5	6.3	11	6.4	12	4.9
Barium	mg/kg	3.5	33	14	8.3	8.3	12	16	33	16	16	10
Beryllium	mg/kg	0.4 U	0.4 U	0.36 U	0.4 U	0.4 U	0.4 U	0.4 U	0.47	0.36 U	0.31 J	0.4 U
Cadmium	mg/kg	0.19 J	2.1	1.5	0.89	1.6	1.3	2.6	1.2	1.4	1.4	1.3
Calcium	mg/kg	980	940	960	910	1100	1900	1200	2800	2200	1100	1900
Chromium	mg/kg	0.37 J	2.3	0.94	1 U	1 U	1.7	1.7	11	1.6	2.3	1.6
Cobalt	mg/kg	0.69 J	1.9	1.5	1.3	1.7	1.8	1.9	5.9	1.9	3.7	1.8
Copper	mg/kg	1.4 J	30	7.9	2	8.9	7.7	9.1	14	7.4	13	5.6
Iron	mg/kg	210	2300	1100	490	890	1700	1900	6800	1400	830	1300
Lead	mg/kg	0.73 U	23	4.4	2.5	2.6	2.9	3.9	15	14	12	8.5
Magnesium	mg/kg	440	480	360	300	380	910	560	300	480	170	940
Manganese	mg/kg	5.2	60	29	13	38	54	52	91	41	7.8	41
Mercury	mg/kg	0.016 J	0.096	0.047 J	0.03 J	0.32 J	0.076 J	0.42 J	0.017 J	0.055 J	0.04 J	0.071
Nickel	mg/kg	4 U	4.7	1.5 J	4 U	1.5 J	2.1 J	2.2 J	18	2.2 J	6.4	1.6 J
Potassium	mg/kg	870	1400	1200	1200	1400	1300	1400	1100	1200	1200	1300
Selenium	mg/kg	1 UJ	1 UJ	0.53 J	1 UJ	1 UJ	1 UJ	0.73 J	2.2 J	0.55 J	0.91 J	1 UJ
Silver	mg/kg	1 U	0.27 J	0.91 U	1 U	1 U	1 U	1 U	1 U	0.91 U	1 U	1 U
Sodium	mg/kg	490	570	610	620	690	640	650	530	600	590	590
Thallium	mg/kg	1 U	1 U	0.91 U	1 U	1 U	1 U	1 U	1 U	0.91 U	1 U	1 U
Vanadium	mg/kg	0.59 J	3.9	1.5	0.75 J	1.6	3.1	3.2	18	2.7	4.9	3
Zinc	mg/kg	11 J	86 J	52 J	18 J	35 J	31 J	42 J	92 J	63 J	98 J	40 J

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Earthworm Tissue Analyte Concentrations
Sauget, IL

Analyte	Site	SITE Q									
	Sample ID	Q-9	Q-10	Q-11	Q-12	Q-21 (Dup of Q-12)	Q-13	Q-14	Q-15	Q-16	Q-17
		#25	#21	#3	#20	#9	#23	#26	#1	#13	#5
	Sample Date	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02
	Percent Lipids	5.2	6.2	2.6	9.4	1.6	6.6	19	3.2	4.2	3.4
SVOCs	**Units**										
1,2,4-Trichlorobenzene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
1,2-Dichlorobenzene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
1,3-Dichlorobenzene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
1,4-Dichlorobenzene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
2,4,5-Trichlorophenol	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
2,4,6-Trichlorophenol	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
2,4-Dichlorophenol	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
2,4-Dimethylphenol	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
2,4-Dinitrophenol	ug/kg	10000 U	10000 U	10000 U	10000 U	5100 U	5100 U	10000 U	5100 U	10000 U	5100 U
2,4-Dinitrotoluene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
2,6-Dinitrotoluene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
2-Chloronaphthalene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
2-Chlorophenol	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
2-Methylnaphthalene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
2-Methylphenol (o-Cresol)	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
2-Nitroaniline	ug/kg	10000 U	10000 U	10000 U	10000 U	5100 U	5100 U	10000 U	5100 U	10000 U	5100 U
2-Nitrophenol	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
3,3'-Dichlorobenzidine	ug/kg	4000 U	4000 U	4000 U	4000 U	2000 U	2000 U	4000 U	2000 U	4000 U	2000 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
3-Nitroaniline	ug/kg	10000 U	10000 U	10000 U	10000 U	5100 U	5100 U	10000 U	5100 U	10000 U	5100 U
4,6-Dinitro-2-methylphenol	ug/kg	10000 U	10000 U	10000 U	10000 U	5100 U	5100 U	10000 U	5100 U	10000 U	5100 U
4-Bromophenyl Phenyl Ether	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
4-Chloro-3-methylphenol	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
4-Chloroaniline	ug/kg	4000 U	4000 U	4000 U	4000 U	2000 U	2000 U	4000 U	2000 U	4000 U	2000 U
4-Chlorophenyl Phenyl Ether	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
4-Nitroaniline	ug/kg	10000 U	10000 U	10000 U	10000 U	5100 U	5100 U	10000 U	5100 U	10000 U	5100 U
4-Nitrophenol	ug/kg	10000 U	10000 U	10000 U	10000 U	5100 U	5100 U	10000 U	5100 U	10000 U	5100 U
Acenaphthene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Acenaphthylene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Anthracene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Benzo(a)anthracene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Benzo(a)pyrene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	320 J	2000 U	990 U
Benzo(b)fluoranthene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	370 J	2000 U	990 U
Benzo(g,h,i)perylene	ug/kg	2000 U	520 J	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Benzo(k)fluoranthene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	320 J	2000 U	990 U
bis(2-Chloroethoxy)methane	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
bis(2-Chloroethyl)ether	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
bis(2-Ethylhexyl)phthalate	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Butyl Benzyl Phthalate	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Carbazole	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Chrysene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	240 J	2000 U	990 U
Dibenzo(a,h)anthracene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Dibenzofuran	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Diethyl Phthalate	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Dimethyl Phthalate	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Di-n-butylphthalate	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Di-n-octylphthalate	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	250 J	2000 U	990 U

NOTES:
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R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determi
NA - Not applicable

Table III-A7
Earthworm Tissue Analyte Concentrations
Sauget, IL

Analyte	Site	SITE Q									
	Sample ID	Q-9	Q-10	Q-11	Q-12	Q-21 (Dup of Q-12)	Q-13	Q-14	Q-15	Q-16	Q-17
		#25	#21	#3	#20	#9	#23	#26	#1	#13	#5
	Sample Date	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02
	Percent Lipids	5.2	6.2	2.6	9.4	1.6	6.6	19	3.2	4.2	3.4
SVOCs	**Units**										
Fluoranthene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Fluorene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Hexachlorobenzene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Hexachlorobutadiene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Hexachlorocyclopentadiene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Hexachloroethane	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Indeno(1,2,3-cd)pyrene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Isophorone	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Naphthalene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Nitrobenzene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
N-Nitroso-di-n-propylamine	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
N-Nitrosodiphenylamine	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Pentachlorophenol	ug/kg	14 J	15 J	32 J	200 U	100 U	10 J	11 J	14 J	16 J	12 J
Phenanthrene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Phenol	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Pyrene	ug/kg	2000 U	2000 U	2000 U	2000 U	990 U	990 U	2000 U	990 U	2000 U	990 U
Pesticides											
4,4'-DDD	ug/kg	40 U	40 U	40 U	40 U	20 U	40 U	40 U	20 U	40 U	20 U
4,4'-DDE	ug/kg	40 U	4.8 J	40 U	40 U	20 U	40 U	180 J	20 U	40 U	2.4 J
4,4'-DDT	ug/kg	40 U	29 J	40 U	750 J	370 J	720 J	400 J	20 U	40 U	2.5 J
Aldrin	ug/kg	20 U	20 U	20 U	20 U	10 U	20 U	20 U	10 U	20 U	10 U
alpha-BHC	ug/kg	20 U	20 U	20 U	20 U	10 U	1.8 J	20 U	10 U	5.1 J	10 U
alpha-Chlordane	ug/kg	20 U	20 U	20 U	20 U	10 U	51 J	20 U	10 U	20 U	10 U
beta-BHC	ug/kg	20 U	20 U	20 U	20 U	10 U	47 J	20 U	10 U	20 U	10 U
delta-BHC	ug/kg	20 U	20 U	7 J	12 J	3.3 J	20 U	20 U	6.3 J	20 U	1.1 J
Dieldrin	ug/kg	12 J	5.4 J	100 J	400	210	260	300	170	5.4 J	2.1 J
Endosulfan I	ug/kg	20 U	20 U	20 U	20 U	10 U	20 U	20 U	10 U	20 U	10 U
Endosulfan II	ug/kg	40 U	40 U	40 U	40 U	20 U	40 U	40 U	20 U	40 U	20 U
Endosulfan Sulfate	ug/kg	40 U	40 U	40 U	40 U	20 U	40 U	40 U	20 U	14 J	2.7 J
Endrin	ug/kg	40 U	40 U	40 U	40 U	20 U	40 U	40 U	20 U	40 U	20 U
Endrin Aldehyde	ug/kg	40 U	40 U	40 U	40 U	20 U	40 U	40 U	20 U	40 U	20 U
Endrin Ketone	ug/kg	14 J	16 J	40 U	40 U	20 U	40 U	40 U	20 U	40 U	20 U
gamma-BHC (Lindane)	ug/kg	20 U	20 U	20 U	20 U	10 U	20 U	20 U	10 U	20 U	10 U
gamma-Chlordane	ug/kg	20 U	20 U	20 U	20 U	10 U	20 U	20 U	10 U	20 U	10 U
Heptachlor	ug/kg	2.8 J	20 U	20 U	20 U	10 U	20 U	20 U	10 U	20 U	10 U
Heptachlor Epoxide	ug/kg	20 U	20 U	20 U	20 U	10 U	20 U	20 U	10 U	20 U	10 U
Methoxychlor	ug/kg	12 J	68 J	200 U	200 U	100 U	200 U	200 U	100 U	200 U	5.2 J
Toxaphene	ug/kg	2000 U	2000 U	2000 U	2000 U	1000 U	2000 U	2000 U	1000 U	2000 U	1000 U
Herbicides											
2,4-D	ug/kg	140 J	50 U	50 U	100 U	50 U	25 U	50 U	180 J	82 J	100 J
2,4-DB	ug/kg	50 U	50 U	50 U	100 U	50 U	25 U	50 U	25 U	25 R	25 U
2,4,5-T	ug/kg	50 U	50 U	50 U	100 U	50 U	25 U	50 U	25 U	25 R	25 U
2,4,5-TP (Silvex)	ug/kg	50 U	50 U	50 U	100 U	50 U	25 U	50 U	25 U	18 J	25 U
Dalapon	ug/kg	12000 U	12000 U	12000 U	24000 U	12000 U	6000 U	12000 U	6000 U	6000 R	6000 U
Dicamba	ug/kg	120 U	120 U	120 U	240 U	120 U	60 U	120 U	60 U	60 R	60 U
Dichlorprop	ug/kg	600 U	600 U	600 U	1200 U	600 U	300 U	600 U	300 U	300 R	300 U
Dinoseb	ug/kg	2000 U	2000 U	2000 UJ	2000 UJ	990 UJ	990 U	2000 U	990 UJ	2000 UJ	990 UJ
MCPA	ug/kg	85000 J	91000 J	67000 J	32000 J	54000	41000 J	12000 U	9200 J	6000 R	9200 J
MCPP	ug/kg	12000 U	12000 U	12000 U	24000 U	12000 U	6000 U	12000 U	6000 U	6000 R	6000 U

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Table III-A7
Earthworm Tissue Analyte Concentrations
Sauget, IL

Analyte	Site / Sample ID / Sample Date / Percent Lipids	SITE Q									
		Q-9 #25 11/18/02 5.2	Q-10 #21 11/18/02 6.2	Q-11 #3 11/18/02 2.6	Q-12 #20 11/18/02 9.4	Q-21 (Dup of Q-12) #9 11/18/02 1.6	Q-13 #23 11/18/02 6.6	Q-14 #26 11/18/02 19	Q-15 #1 11/18/02 3.2	Q-16 #13 11/18/02 4.2	Q-17 #5 11/18/02 3.4
PCBs	**Units**										
Decachlorobiphenyl	ug/kg	100 U	100 U	100 U	100 U	50 U	50 U	100 U	50 U	100 U	50 U
Dichlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	10 U	10 U	20 U	10 U	20 U	10 U
Heptachlorobiphenyl	ug/kg	60 U	60 U	110	1300	560	75	60 U	1100	60 U	30 U
Hexachlorobiphenyl	ug/kg	75	40 U	670	4400	1800	250	120	2700	66	20 U
Monochlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	10 U	10 U	20 U	10 U	20 U	10 U
Nonachlorobiphenyl	ug/kg	100 U	100 U	100 U	100 U	50 U	50 U	100 U	50 U	100 U	50 U
Octachlorobiphenyl	ug/kg	60 U	60 U	60 U	140	53	30 U	60 U	160	60 U	30 U
Pentachlorobiphenyl	ug/kg	40 U	40 U	3300	7400	2700	630	790	3100	40 U	20 U
Tetrachlorobiphenyl	ug/kg	40 U	40 U	3600	3500	1200	500	450	1000	40 U	20 U
Trichlorobiphenyl	ug/kg	20 U	20 U	260	130	30	130	20 U	14	20 U	10 U
Total PCBs	ug/kg	75	100 U	7940	16870	6343	1585	1360	8074	66	50 U
Dioxins/Furans											
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	pg/g	39	17	190	190	54	130	170	37	21	28
1,2,3,4,6,7,8-HpCDF	pg/g	6.2 J	3.8 U	30	37	13	22	38	6.5 J	5.1 J	5.4 J
1,2,3,4,7,8,9-HpCDF	pg/g	1.2 U	1.3 U	1.9 U	5.9 J	1.3 U	2 U	2.7 U	0.68 U	0.73 U	0.88 U
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	1.4 U	1.2 U	0.99 U	2.9 U	0.82 UJ	1.2 U	1.9 U	0.62 U	0.58 U	0.88 U
1,2,3,4,7,8-HxCDF	pg/g	0.99 U	0.74 U	4.1 U	16	5 J	5.3 J	4.7 U	2.6 U	1.3 U	0.8 U
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	1.3 U	1.1 U	21	13	4.7 U	6.7 J	15	1.4 U	1.1 U	0.9 U
1,2,3,6,7,8-HxCDF	pg/g	0.61 U	0.63 U	1.7 UJ	6.8 J	2.8 UJ	1.5 U	2.7 U	0.82 UJ	0.49 UJ	0.3 UJ
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	pg/g	1.3 U	1.1 U	6 J	6.5 J	2.5 UJ	1.7 U	6.5 J	0.56 U	1.1 U	0.79 U
1,2,3,7,8,9-HxCDF	pg/g	0.84 U	0.87 U	0.73 U	1 U	0.73 U	0.96 U	1 U	0.53 U	0.52 U	0.41 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	1 U	0.92 U	2.3 U	14	6 J	3.4 U	2.5 U	0.93 U	0.6 U	0.73 U
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	pg/g	1.8 U	1.6 U	2.6 U	3 U	1.7 U	2.3 U	2.5 U	1.1 U	0.87 U	1.1 U
2,3,4,6,7,8-HxCDF	pg/g	0.71 U	0.74 U	1 U	4.1 U	2 U	1.4 U	1.9 U	0.45 U	0.44 U	0.35 U
2,3,4,7,8-PeCDF	pg/g	0.99 U	0.91 U	5.1 J	14	5.4 J	5.1 J	5.6 J	1.9 U	0.54 U	0.72 U
2,3,7,8-TCDD	pg/g	0.63 U	0.54 U	0.79 U	1.4 J	0.83 U	2	0.98 U	0.43 U	0.34 U	0.47 U
2,3,7,8-Tetrachlorodibenzofuran	pg/g	0.55 U	0.48 U	12	41	17 J	25	12	7.6	1.6 J	0.9 U
OCDD	pg/g	750	430	3400	2100	630	1700	1900	530	310	490
OCDF	pg/g	28	17	93	110	44	94	120	24	20	27
Total HpCDD	pg/g	86	38	410	380	110	270	310	73	44	65
Total HpCDF	pg/g	22	15	110	120	36	81	120	22	18	25
Total HxCDD	pg/g	3 U	1.6 U	76	87	23	36	75	2.4 U	2.7	3.1
Total HxCDF	pg/g	3.2 U	4.4	46	120	21	63	37	5.9	5.3	8.1
Total PeCDD	pg/g	1.8 U	1.6 U	4.9 U	32	6.7	6.5	4.5 U	1.1 U	0.97 U	1.2 U
Total PeCDF	pg/g	1.1 U	0.96 U	29	150	27	44	30	1.9 U	1.6 U	1.6 U
Total TCDD	pg/g	1.6	8.3	41	70	22	20	27	1.4	3.6	37
Total TCDF	pg/g	1	1.4	87	280	75 J	150	83	32	2.2	1.4
Metals											
Aluminum	mg/kg	830	370	250 J	880 J	350 J	1900	800	520 J	870 J	310 J
Antimony	mg/kg	2 UJ	2 UJ	2 U	2 U	1.8 U	2 UJ	0.42 J	2 U	2 U	1.8 U
Arsenic	mg/kg	4.2	7.3	5.6	5.8	3.4	5.2	5.1	4.1	6.1	5.4
Barium	mg/kg	14	8.7	10	16	8.2	36	17	9.9	17	7
Beryllium	mg/kg	0.4 U	0.4 U	0.4 U	0.4 U	0.36 U	0.4 U	0.4 U	0.4 U	0.4 U	0.36 U
Cadmium	mg/kg	1.2	1.5	0.9	1.5	0.86	1.3	1	1.2	1.1	0.75
Calcium	mg/kg	810	1000	860	1300	690	1500	1400	730	1600	1300
Chromium	mg/kg	1.4	0.8 J	0.7 J	1.9	0.93 U	3.4	1.6	1	1.5	0.77 J
Cobalt	mg/kg	1.5	1.6	1.3	2.1	1.1	1.9	1.7	1.4	1.8	1.4
Copper	mg/kg	4.9	4.5	9.5	5	2.6	6.4	10	3.1	3.6	2
Iron	mg/kg	1400	750	510	1600	620	3200	1400	900	1700	920
Lead	mg/kg	4.1	2	4.4	6.5	3.4	8.4	7.3	2.8	2.8	1.6
Magnesium	mg/kg	340	340	220	500	230	660	480	300	630	460
Manganese	mg/kg	45	26	14	33	18	52	39	14	41	25
Mercury	mg/kg	0.019 J	0.19 UJ	0.018 J	0.022 J	0.01 J	0.014 J	0.017 J	0.026 J	0.027 J	0.018 J
Nickel	mg/kg	1.4 J	4 U	1.2 J	2.5 J	1.2 J	2.8 J	2.1 J	4 U	1.9 J	1.2 J
Potassium	mg/kg	1100	1400	1300	1400	840	1300	1400	1100	1400	1100
Selenium	mg/kg	1 UJ	0.62 J	0.55 J	0.72 J	0.91 UJ	1 UJ	1 UJ	0.67 J	0.53 J	0.45 J
Silver	mg/kg	1 U	1 U	1 U	1 U	0.91 U	1 U	1 U	1 U	1 U	0.91 U
Sodium	mg/kg	570	730	630	700	470	520	670	600	680	570
Thallium	mg/kg	1 U	1 U	1 U	1 U	0.91 U	1 U	1 U	1 U	1 U	0.91 U
Vanadium	mg/kg	2.2	1.2	0.72 J	2.4	0.98	4.7	2.1	1.5	2.4	1.2
Zinc	mg/kg	34 J	34 J	29 J	39 J	22 J	47 J	36 J	26 J	30 J	25 J

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NA - Not applicable

Table III-A7
Earthworm Tissue Analyte Concentrations
Sauget, IL

Analyte	Area	SITE Q			SITE R					SITE S
	Sample ID	Q-18 #11	Q-19 #28	Q-20 #27	R-1 #19	R-2 #16	R-3 #4	R-4 #12	R-5 #17	S-1 #29
	Sample Date	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02
	Percent Lipids	5.2	6.6	6.0	5.4	3.0	2.4	6.6	13	5.4
SVOCs	**Units**									
1,2,4-Trichlorobenzene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
1,2-Dichlorobenzene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
1,3-Dichlorobenzene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
1,4-Dichlorobenzene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
2,4,5-Trichlorophenol	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
2,4,6-Trichlorophenol	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
2,4-Dichlorophenol	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
2,4-Dimethylphenol	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
2,4-Dinitrophenol	ug/kg	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U
2,4-Dinitrotoluene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
2,6-Dinitrotoluene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
2-Chloronaphthalene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
2-Chlorophenol	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
2-Methylnaphthalene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
2-Methylphenol (o-Cresol)	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
2-Nitroaniline	ug/kg	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U
2-Nitrophenol	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
3,3'-Dichlorobenzidine	ug/kg	4000 U	4000 U	4000 U	4000 U	4000 U	4000 U	4000 U	4000 U	4000 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
3-Nitroaniline	ug/kg	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U
4,6-Dinitro-2-methylphenol	ug/kg	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U
4-Bromophenyl Phenyl Ether	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
4-Chloro-3-methylphenol	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
4-Chloroaniline	ug/kg	4000 U	4000 U	4000 U	4000 U	4000 U	4000 U	4000 U	4000 U	4000 U
4-Chlorophenyl Phenyl Ether	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
4-Nitroaniline	ug/kg	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U
4-Nitrophenol	ug/kg	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U
Acenaphthene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Acenaphthylene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Anthracene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Benzo(a)anthracene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Benzo(a)pyrene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Benzo(b)fluoranthene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Benzo(g,h,i)perylene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Benzo(k)fluoranthene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
bis(2-Chloroethoxy)methane	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
bis(2-Chloroethyl)ether	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
bis(2-Ethylhexyl)phthalate	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Butyl Benzyl Phthalate	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Carbazole	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Chrysene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Dibenzo(a,h)anthracene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Dibenzofuran	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Diethyl Phthalate	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Dimethyl Phthalate	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Di-n-butylphthalate	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Di-n-octylphthalate	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate an
may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the samp
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determi
NA - Not applicable

Table III-A7
Earthworm Tissue Analyte Concentrations
Sauget, IL

Analyte	Area	SITE Q			SITE R					SITE S
	Sample ID	Q-18 #11	Q-19 #28	Q-20 #27	R-1 #19	R-2 #16	R-3 #4	R-4 #12	R-5 #17	S-1 #29
	Sample Date	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02
	Percent Lipids	5.2	6.6	6.0	5.4	3.0	2.4	6.6	13	5.4
SVOCs	**Units**									
Fluoranthene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Fluorene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Hexachlorobenzene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Hexachlorobutadiene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Hexachlorocyclopentadiene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Hexachloroethane	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Indeno(1,2,3-cd)pyrene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Isophorone	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Naphthalene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Nitrobenzene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
N-Nitroso-di-n-propylamine	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
N-Nitrosodiphenylamine	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Pentachlorophenol	ug/kg	200 U	100 U	12 J	200 U	200 U	200 U	8.8 J	200 U	100 U
Phenanthrene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Phenol	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Pyrene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Pesticides										
4,4'-DDD	ug/kg	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
4,4'-DDE	ug/kg	40 U	5.1 J	3.6 J	40 U	40 U	40 U	40 U	40 U	4.4 J
4,4'-DDT	ug/kg	14 J	40 U	40 U	40 U	8.7 J	12 J	40 U	6.8 J	40 U
Aldrin	ug/kg	20 U	20 U	20 U	20 U	20 U	2.6 J	20 U	20 U	20 U
alpha-BHC	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	10 J	20 U
alpha-Chlordane	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
beta-BHC	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
delta-BHC	ug/kg	6 J	20 U	20 U	6.5 J	17 J	20 U	20 U	11 J	20 U
Dieldrin	ug/kg	40 U	5.7 J	3.4 J	6 J	40 U	2.9 J	40 U	40 U	4.5 J
Endosulfan I	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Endosulfan II	ug/kg	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
Endosulfan Sulfate	ug/kg	40 U	5.9 J	40 U	6.1 J	40 U	40 U	40 U	6.7 J	40 U
Endrin	ug/kg	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
Endrin Aldehyde	ug/kg	40 U	40 U	40 U	40 U	4.4 J	40 U	40 U	40 U	40 U
Endrin Ketone	ug/kg	40 U	40 U	40 U	40 U	40 U	31 J	40 U	40 U	40 U
gamma-BHC (Lindane)	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
gamma-Chlordane	ug/kg	20 U	2.4 J	20 U	20 U	20 U	4.2 J	20 U	20 U	20 U
Heptachlor	ug/kg	20 U	20 U	6.3 J	20 U	8.3 J	20 U	20 U	20 U	20 U
Heptachlor Epoxide	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Methoxychlor	ug/kg	23 J	24 J	200 U	7.8 J	200 U	14 J	200 U	15 J	200 U
Toxaphene	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Herbicides										
2,4-D	ug/kg	100 U	50 U	50 U	110 J	100 U	100 U	100 U	100 U	50 U
2,4-DB	ug/kg	100 U	50 U	50 U	100 U	100 U	100 U	100 U	100 U	50 U
2,4,5-T	ug/kg	100 U	20 J	50 U	100 U	100 U	100 U	100 U	100 U	50 U
2,4,5-TP (Silvex)	ug/kg	100 U	50 U	50 U	100 U	100 U	100 U	100 U	100 U	50 U
Dalapon	ug/kg	24000 U	12000 U	12000 U	24000 U	24000 U	24000 U	24000 U	24000 U	12000 U
Dicamba	ug/kg	240 U	120 U	120 U	240 U	240 U	240 U	240 U	240 U	120 U
Dichlorprop	ug/kg	1200 U	600 U	600 U	1200 U	1200 U	1200 U	1200 U	1200 U	600 U
Dinoseb	ug/kg	2000 UJ	2000 U	2000 U	2000 U	2000 U	2000 UJ	2000 UJ	2000 U	2000 U
MCPA	ug/kg	43000 J	12000 U	54000	20000 J	32000 J	22000 J	42000 J	29000 J	80000 J
MCPP	ug/kg	24000 U	12000 U	12000 U	24000 U	24000 U	24000 U	24000 U	24000 U	12000 U

NOTES:
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UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate an
may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the samp
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determi
NA - Not applicable

Table III-A7
Earthworm Tissue Analyte Concentrations
Sauget, IL

Analyte	Area	SITE Q			SITE R					SITE S
	Sample ID	Q-18 #11	Q-19 #28	Q-20 #27	R-1 #19	R-2 #16	R-3 #4	R-4 #12	R-5 #17	S-1 #29
	Sample Date	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02	11/18/02
	Percent Lipids	5.2	6.6	6.0	5.4	3.0	2.4	6.6	13	5.4
PCBs	**Units**									
Decachlorobiphenyl	ug/kg	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Dichlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Heptachlorobiphenyl	ug/kg	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Hexachlorobiphenyl	ug/kg	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
Monochlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Nonachlorobiphenyl	ug/kg	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Octachlorobiphenyl	ug/kg	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U	60 U
Pentachlorobiphenyl	ug/kg	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
Tetrachlorobiphenyl	ug/kg	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
Trichlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Total PCBs	ug/kg	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Dioxins/Furans										
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	pg/g	38	32	21	8.8 J	8.2 J	8.5 J	4.7 U	4.8 U	78
1,2,3,4,6,7,8-HpCDF	pg/g	6.5 J	6 J	6 J	1.4 U	1.1 U	1.1 U	1.6 U	0.82 U	9.9 J
1,2,3,4,7,8,9-HpCDF	pg/g	1.5 U	1.2 U	1.4 U	0.69 U	0.64 U	0.81 U	2.1 U	0.52 U	1.8 U
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	1.2 U	1.3 U	1.8 U	1 UJ	0.61 U	0.8 U	1.4 U	0.48 U	2.1 U
1,2,3,4,7,8-HxCDF	pg/g	0.94 U	0.82 U	1.1 U	0.47 U	0.33 U	0.46 U	0.83 U	0.24 U	1.1 U
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	1.6 U	1.2 U	1.6 U	0.94 U	0.56 U	0.72 U	1.3 U	0.43 U	1.9 U
1,2,3,6,7,8-HxCDF	pg/g	0.8 U	0.69 U	0.9 U	0.4 UJ	0.28 UJ	0.39 UJ	0.7 U	0.2 UJ	0.94 U
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	pg/g	1.1 U	1.2 U	1.6 U	0.94 UJ	0.55 U	0.72 U	1.3 U	0.43 U	1.9 U
1,2,3,7,8,9-HxCDF	pg/g	1.1 U	0.96 U	1.2 U	0.55 U	0.39 U	0.54 U	0.97 U	0.28 U	1.3 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	0.69 U	1.6 U	1.7 UJ	0.64 U	0.4 U	0.61 U	0.53 U	0.33 U	1.4 U
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	pg/g	1.3 U	2.5 U	3 U	1.4 U	0.63 U	1 U	0.98 U	0.57 U	2.6 U
2,3,4,6,7,8-HxCDF	pg/g	0.94 U	0.81 U	1.1 U	0.47 U	0.33 U	0.46 U	0.82 U	0.24 U	1.1 U
2,3,4,7,8-PeCDF	pg/g	0.68 U	1.6 U	1.7 UJ	0.63 U	0.39 U	0.6 U	0.52 U	0.33 U	1.4 U
2,3,7,8-TCDD	pg/g	0.48 U	0.77 UJ	0.75 UJ	0.38 U	0.37 U	0.55 U	0.41 U	0.26 U	1.6 J
2,3,7,8-Tetrachlorodibenzofuran	pg/g	0.88 U	0.87 UJ	0.89 UJ	0.47 UJ	0.71 U	0.45 U	0.29 U	0.24 U	0.55 U
OCDD	pg/g	840	470	330	420	280	310	140	210	2400
OCDF	pg/g	35	25	25	5.4 U	3.8 U	3.9 U	2.1 U	2.2 U	41
Total HpCDD	pg/g	82	76	51	18	19	18	5.5	6.2	160
Total HpCDF	pg/g	29	22	26	2.5 U	2.6 U	3.6 U	2.1 U	1.5 U	34
Total HxCDD	pg/g	3.2 U	2.9 U	2.3 U	1.2 U	2 U	1.3 U	1.4 U	1.6 U	4.8 U
Total HxCDF	pg/g	9	4.3 U	5.5	0.99 U	0.8 U	1.5 U	0.97 U	1.3 U	5.2
Total PeCDD	pg/g	1.7 U	2.5 U	3 U	1.4 U	0.9 U	1.2 U	0.98 U	1.4 U	2.6 U
Total PeCDF	pg/g	1.9 U	2.1 U	2.1 UJ	0.64 U	0.58 U	0.61 U	0.57 U	0.41 U	1.5 U
Total TCDD	pg/g	31	4.5 J	13 J	2.5	3.2	0.55 U	0.69 U	0.41 U	3.1
Total TCDF	pg/g	3.1	1.8 J	0.89 UJ	0.47 UJ	0.71 U	0.45 U	0.29 U	0.38 U	0.84 U
Metals										
Aluminum	mg/kg	490 J	470	670	410 J	420 J	430 J	710 J	690 J	790
Antimony	mg/kg	1.8 U	2 U	2 U	1.8 U	2 U	1.8 U	2 U	1.8 U	2 U
Arsenic	mg/kg	5.6	4.7	5.7	4.3	5.6	5.6	5.4	5.1	5.8
Barium	mg/kg	15	10	13	6.5	6.1	5.3	7.8	8.3	13
Beryllium	mg/kg	0.36 U	0.4 U	0.4 U	0.36 U	0.4 U	0.36 U	0.4 U	0.36 U	0.4 U
Cadmium	mg/kg	0.88	0.92	0.88	0.91	0.94	0.67	1.1	0.8	1.7
Calcium	mg/kg	1100	870	920	680	710	670	790	760	930
Chromium	mg/kg	1	0.85 J	1.2	0.91 U	1 U	0.78 J	1.3	1.2	1.6
Cobalt	mg/kg	1.5	1.2	1.6	1.2	1.5	1.4	1.5	1.5	1.8
Copper	mg/kg	2.6	3.2	2.8	2.7	3.1	2.8	3.7	3.3	5.6
Iron	mg/kg	1100	850	1200	780	780	740	1300	1200	1400
Lead	mg/kg	1.9	3.1	2.1	2.4	0.87	0.76	1.6	1.4	3.8
Magnesium	mg/kg	360	300	360	350	320	280	410	380	370
Manganese	mg/kg	39	24	32	34	26	29	33	37	48
Mercury	mg/kg	0.02 J	0.014 J	0.017 J	0.027 J	0.026 J	0.024 J	0.03 J	0.023 J	0.078
Nickel	mg/kg	1.3 J	4 U	4 U	3.6 U	4 U	3.6 U	1.3 J	1.4 J	1.4 J
Potassium	mg/kg	1200	1000	1400	1000	1400	1300	1300	1200	1200
Selenium	mg/kg	0.53 J	1 UJ	1 UJ	0.91 UJ	0.48 J	0.48 J	0.7 J	0.91 UJ	1 UJ
Silver	mg/kg	0.91 U	1 U	1 U	0.91 U	1 U	0.91 U	1 U	0.91 U	1 U
Sodium	mg/kg	620	540	660	550	700	640	660	620	650
Thallium	mg/kg	0.91 U	1 U	1 U	0.91 U	1 U	0.91 U	1 U	0.91 U	1 U
Vanadium	mg/kg	1.6	1.4	1.7	1.3	1.4	1.4	2.3	2.2	2.5
Zinc	mg/kg	30 J	19 J	36 J	21 J	22 J	20 J	29 J	21 J	32 J

NOTES:
U = Not detected at the MDL.
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UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate an
may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the samp
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NA - Not applicable

Table III-A8
Insect Tissue Analyte Concentrations
Sauget, IL

		Raw Data					Adjusted Data				
Analyte		OFF SITE (Background)	ON SITE				OFF SITE (Background)	ON SITE			
	Sample ID Sample Date	IN OS1 10/10/02	IN P1 10/10/02	IN Q1 10/10/02	IN Q2 10/10/02	IN ROS1 10/10/02	IN OS1 10/10/02	IN P1 10/10/02	IN Q1 10/10/02	IN Q2 10/10/02	IN ROS1 10/10/02
SVOCs	**Units**										
1,2,4-Trichlorobenzene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
1,2-Dichlorobenzene	ug/kg	NR	NR	990 UJ	990 UJ	NR	990 U	990 U	990 UJ	990 UJ	990 U
1,3-Dichlorobenzene	ug/kg	NR	NR	990 UJ	990 UJ	NR	990 U	990 U	990 UJ	990 UJ	990 U
1,4-Dichlorobenzene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
2,4,5-Trichlorophenol	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
2,4,6-Trichlorophenol	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
2,4-Dichlorophenol	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
2,4-Dimethylphenol	ug/kg	NR	NR	990 R	990 R	NR	990 R	990 R	990 R	990 R	990 R
2,4-Dinitrophenol	ug/kg	NR	NR	5100 U	5100 U	NR	5100 U	5100 U	5100 U	5100 U	5100 U
2,4-Dinitrotoluene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
2,6-Dinitrotoluene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
2-Chloronaphthalene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
2-Chlorophenol	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
2-Methylnaphthalene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
2-Methylphenol (o-Cresol)	ug/kg	NR	NR	990 UJ	990 UJ	NR	990 U	990 U	990 UJ	990 UJ	990 U
2-Nitroaniline	ug/kg	NR	NR	5100 U	5100 U	NR	5100 U	5100 U	5100 U	5100 U	5100 U
2-Nitrophenol	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
3,3'-Dichlorobenzidine	ug/kg	NR	NR	2000 U	2000 U	NR	2000 U	2000 U	2000 U	2000 U	2000 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	NR	NR	990 UJ	990 UJ	NR	990 U	990 U	990 UJ	990 UJ	990 U
3-Nitroaniline	ug/kg	NR	NR	5100 U	5100 U	NR	5100 U	5100 U	5100 U	5100 U	5100 U
4,6-Dinitro-2-methylphenol	ug/kg	NR	NR	5100 U	5100 U	NR	5100 U	5100 U	5100 U	5100 U	5100 U
4-Bromophenyl Phenyl Ether	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
4-Chloro-3-methylphenol	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
4-Chloroaniline	ug/kg	NR	NR	2000 U	2000 U	NR	2000 U	2000 U	2000 U	2000 U	2000 U
4-Chlorophenyl Phenyl Ether	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
4-Nitroaniline	ug/kg	NR	NR	5100 U	5100 U	NR	5100 U	5100 U	5100 U	5100 U	5100 U
4-Nitrophenol	ug/kg	NR	NR	5100 U	5100 U	NR	5100 U	5100 U	5100 U	5100 U	5100 U
Acenaphthene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Acenaphthylene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Anthracene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Benzo(a)anthracene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Benzo(a)pyrene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Benzo(b)fluoranthene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Benzo(g,h,i)perylene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Benzo(k)fluoranthene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
bis(2-Chloroethoxy)methane	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
bis(2-Chloroethyl)ether	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
bis(2-Ethylhexyl)phthalate	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Butyl Benzyl Phthalate	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Carbazole	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Chrysene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Dibenzo(a,h)anthracene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Dibenzofuran	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Diethyl Phthalate	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Dimethyl Phthalate	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Di-n-butylphthalate	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Di-n-octylphthalate	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
NR - Not analyzed
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.

Adjusted data - Chemical analysis was not completed for all fractions of all samples (e.g., PCB homologs for IN OS1). In such cases, an average for each compound was calculated from samples where analysis did occur for that fraction (e.g., PCB homologs for IN P1, IN Q1, IN Q2, IN ROS1), using ½ the detection limit for non-detected compounds (unless all samples were undetected, in that case the average value was calculated as the average of the detection limits listed and was given a laboratory indicator of "U"). This averaged value was then used in the foodchain modeling equations.

Table III-A8
Insect Tissue Analyte Concentrations
Sauget, IL

		Raw Data					Adjusted Data				
Analyte		OFF SITE (Background)	ON SITE				OFF SITE (Background)	ON SITE			
	Sample ID Sample Date	IN OS1 10/10/02	IN P1 10/10/02	IN Q1 10/10/02	IN Q2 10/10/02	IN ROS1 10/10/02	IN OS1 10/10/02	IN P1 10/10/02	IN Q1 10/10/02	IN Q2 10/10/02	IN ROS1 10/10/02
SVOCs	**Units**										
Fluoranthene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Fluorene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Hexachlorobenzene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Hexachlorobutadiene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Hexachlorocyclopentadiene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Hexachloroethane	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Indeno(1,2,3-cd)pyrene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Isophorone	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Naphthalene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Nitrobenzene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
N-Nitroso-di-n-propylamine	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
N-Nitrosodiphenylamine	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Pentachlorophenol	ug/kg	NR	NR	51 U	51 U	NR	51 U	51 U	51 U	51 U	51 U
Phenanthrene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Phenol	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Pyrene	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
Pesticides											
4,4'-DDD	ug/kg	NR	NR	9.9 U	9.9 U	NR	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
4,4'-DDE	ug/kg	NR	NR	9.9 U	9.9 U	NR	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
4,4'-DDT	ug/kg	NR	NR	9.9 U	9.9 U	NR	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
Aldrin	ug/kg	NR	NR	5.1 U	1.2 J	NR	1.9	1.875	5.1 U	1.2 J	1.9
alpha-BHC	ug/kg	NR	NR	5.1 U	5.1 U	NR	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
alpha-Chlordane	ug/kg	NR	NR	5.1 U	5.1 U	NR	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
beta-BHC	ug/kg	NR	NR	5.1 U	5.1 U	NR	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
delta-BHC	ug/kg	NR	NR	0.44 J	5.1 U	NR	1.5	1.495	0.44 J	5.1 U	1.5
Dieldrin	ug/kg	NR	NR	9.9 U	9.9 U	NR	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
Endosulfan I	ug/kg	NR	NR	5.1 U	5.1 U	NR	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Endosulfan II	ug/kg	NR	NR	9.9 U	9.9 U	NR	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
Endosulfan Sulfate	ug/kg	NR	NR	9.9 U	9.9 U	NR	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
Endrin	ug/kg	NR	NR	9.9 U	9.9 U	NR	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
Endrin Aldehyde	ug/kg	NR	NR	9.9 U	9.9 U	NR	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
Endrin Ketone	ug/kg	NR	NR	9.9 U	3.4 J	NR	4.2	4.175	9.9 U	3.4 J	4.2
gamma-BHC (Lindane)	ug/kg	NR	NR	5.1 U	0.43 J	NR	1.5	1.49	5.1 U	0.43 J	1.5
gamma-Chlordane	ug/kg	NR	NR	5.1 U	0.64 J	NR	1.6	1.595	5.1 U	0.64 J	1.6
Heptachlor	ug/kg	NR	NR	0.93 J	5.1 U	NR	1.7	1.74	0.93 J	5.1 U	1.7
Heptachlor Epoxide	ug/kg	NR	NR	5.1 U	5.1 U	NR	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Methoxychlor	ug/kg	NR	NR	51 U	51 U	NR	51 U	51 U	51 U	51 U	51 U
Toxaphene	ug/kg	NR	NR	510 U	510 U	NR	510 U	510 U	510 U	510 U	510 U
Herbicides											
2,4-D	ug/kg	NR	NR	150	68 J	NR	109	109	150	68 J	109
2,4-DB	ug/kg	NR	NR	28 J	25 U	NR	20	20.25	28 J	25 U	20
2,4,5-T	ug/kg	NR	NR	25 U	25 U	NR	25 U	25 U	25 U	25 U	25 U
2,4,5-TP (Silvex)	ug/kg	NR	NR	25 U	25 U	NR	25 U	25 U	25 U	25 U	25 U
Dalapon	ug/kg	NR	NR	6000 U	6000 U	NR	6000 U	6000 U	6000 U	6000 U	6000 U
Dicamba	ug/kg	NR	NR	60 U	60 U	NR	60 U	60 U	60 U	60 U	60 U
Dichlorprop	ug/kg	NR	NR	300 U	300 U	NR	300 U	300 U	300 U	300 U	300 U
Dinoseb	ug/kg	NR	NR	990 U	990 U	NR	990 U	990 U	990 U	990 U	990 U
MCPA	ug/kg	NR	NR	6000 U	6000 U	NR	6000 U	6000 U	6000 U	6000 U	6000 U
MCPP	ug/kg	NR	NR	6000 U	6000 U	NR	6000 U	6000 U	6000 U	6000 U	6000 U

NOTES:
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Table III-A8
Insect Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID / Sample Date	Raw Data: OFF SITE (Background)	Raw Data: ON SITE				Adjusted Data: OFF SITE (Background)	Adjusted Data: ON SITE			
		IN OS1 10/10/02	IN P1 10/10/02	IN Q1 10/10/02	IN Q2 10/10/02	IN ROS1 10/10/02	IN OS1 10/10/02	IN P1 10/10/02	IN Q1 10/10/02	IN Q2 10/10/02	IN ROS1 10/10/02
PCBs	**Units**										
Decachlorobiphenyl	ug/kg	NR	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dichlorobiphenyl	ug/kg	NR	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Heptachlorobiphenyl	ug/kg	NR	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Hexachlorobiphenyl	ug/kg	NR	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Monochlorobiphenyl	ug/kg	NR	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nonachlorobiphenyl	ug/kg	NR	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Octachlorobiphenyl	ug/kg	NR	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Pentachlorobiphenyl	ug/kg	NR	20 U	20 U	10 J	20 U	10	20 U	20 U	10 J	20 U
Tetrachlorobiphenyl	ug/kg	NR	20 U	20 U	17 J	20 U	12	20 U	20 U	17 J	20 U
Trichlorobiphenyl	ug/kg	NR	10 U	10 U	24	10 U	9.8	10 U	10 U	24	10 U
Total PCBs	ug/kg	NA	50 U	50 U	51	50 U	32	50 U	50 U	51	50 U
Dioxins/Furans											
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	pg/g	6.1 J	8.2 J	6.7 J	35000	600	6.1 J	8.2 J	6.7 J	35000	600
1,2,3,4,6,7,8-HpCDF	pg/g	0.65 U	1.9 U	0.62 U	2000	62	0.65 U	1.9 U	0.62 U	2000	62
1,2,3,4,7,8,9-HpCDF	pg/g	0.32 U	1 U	0.27 U	110	2.2 U	0.32 U	1 U	0.27 U	110	2.2 U
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	0.21 U	1.8 UJ	0.3 U	55	5.5 J	0.21 U	1.8 UJ	0.3 U	55	5.5 J
1,2,3,4,7,8-HxCDF	pg/g	0.18 U	1.5 U	0.3 U	22	3 U	0.18 U	1.5 U	0.3 U	22	3 U
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	0.49 U	1.8 U	0.28 U	500	13	0.49 U	1.8 U	0.28 U	500	13
1,2,3,6,7,8-HxCDF	pg/g	0.17 U	1.4 U	0.22 U	19	1.3 U	0.17 U	1.4 U	0.22 U	19	1.3 U
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	pg/g	0.38 U	1.7 UJ	0.26 U	100	5.9 J	0.38 U	1.7 UJ	0.26 U	100	5.9 J
1,2,3,7,8,9-HxCDF	pg/g	0.2 U	2.1 U	0.28 U	4 U	2 U	0.2 U	2.1 U	0.28 U	4 U	2 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	0.28 U	1.6 U	0.4 U	2.7 U	1.3 U	0.28 U	1.6 U	0.4 U	2.7 U	1.3 U
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	pg/g	0.41 U	2.8 U	0.73 U	14	2.6 U	0.41 U	2.8 U	0.73 U	14	2.6 U
2,3,4,6,7,8-HxCDF	pg/g	0.19 U	1.6 U	0.25 U	14	1.5 U	0.19 U	1.6 U	0.25 U	14	1.5 U
2,3,4,7,8-PeCDF	pg/g	0.27 U	1.6 U	0.38 U	9.8	1.4 U	0.27 U	1.6 U	0.38 U	9.8	1.4 U
2,3,7,8-TCDD	pg/g	0.29 UJ	1.6 UJ	0.39 UJ	1.4 J	1.2 J	0.29 UJ	1.6 UJ	0.39 UJ	1.4 J	1.2 J
2,3,7,8-Tetrachlorodibenzofuran	pg/g	0.65 UJ	1.4 UJ	0.78 UJ	5.3	2.3	0.65 UJ	1.4 UJ	0.78 UJ	5.3	2.3
OCDD	pg/g	77	88	99	230000	7900	77	88	99	230000	7900
OCDF	pg/g	2 U	6.7 U	3.1 U	6500	230	2 U	6.7 U	3.1 U	6500	230
Total HpCDD	pg/g	12	17	13	56000	1300	12	17	13	56000	1300
Total HpCDF	pg/g	1 U	1.9 U	2.4 U	11000	200	1 U	1.9 U	2.4 U	11000	200
Total HxCDD	pg/g	0.99 U	1.8 U	0.46 U	2900	140	0.99 U	1.8 U	0.46 U	2900	140
Total HxCDF	pg/g	0.2 U	2.1 U	0.44 U	1700	56	0.2 U	2.1 U	0.44 U	1700	56
Total PeCDD	pg/g	0.59 U	2.8 U	0.73 U	120	51	0.59 U	2.8 U	0.73 U	120	51
Total PeCDF	pg/g	0.39 U	1.6 U	0.61 U	85	20	0.39 U	1.6 U	0.61 U	85	20
Total TCDD	pg/g	1.2 UJ	1.6 U	0.39 UJ	7.7	25	1.2 UJ	1.6 U	0.39 UJ	7.7	25
Total TCDF	pg/g	0.65 UJ	1.4 UJ	0.78 UJ	58	34	0.65 UJ	1.4 UJ	0.78 UJ	58	34
Metals											
Aluminum	mg/kg	NR	16 J	35	31	15 J	24	16 J	35	31	15 J
Antimony	mg/kg	NR	1.8 U	1.7 U	1.7 U	2 U	1.8 U	1.8 U	1.7 U	1.7 U	2 U
Arsenic	mg/kg	NR	0.91 U	0.83 U	0.83 U	1 U	0.89 U	0.91 U	0.83 U	0.83 U	1 U
Barium	mg/kg	NR	1.8	3.2	1.8	1.9	2.2	1.8	3.2	1.8	1.9
Beryllium	mg/kg	NR	0.36 U	0.33 U	0.33 U	0.4 U	0.36 U	0.36 U	0.33 U	0.33 U	0.4 U
Cadmium	mg/kg	NR	0.81	1.6	0.12 J	0.36 J	0.72	0.81	1.6	0.12 J	0.36 J
Calcium	mg/kg	NR	740 J	750 J	450 J	450 J	598	740 J	750 J	450 J	450 J
Chromium	mg/kg	NR	0.21 J	0.16 J	0.19 J	0.2 J	0.19	0.21 J	0.16 J	0.19 J	0.2 J
Cobalt	mg/kg	NR	0.91 U	0.83 U	0.83 U	1 U	0.89 U	0.91 U	0.83 U	0.83 U	1 U
Copper	mg/kg	NR	14	32	23	20	22	14	32	23	20
Iron	mg/kg	NR	43	74	83	39	60	43	74	83	39
Lead	mg/kg	NR	2	0.39 J	0.75	1	1.0	2	0.39 J	0.75	1
Magnesium	mg/kg	NR	380	450	390	360	395	380	450	390	360
Manganese	mg/kg	NR	4.5	26	6.1	5.5	11	4.5	26	6.1	5.5
Mercury	mg/kg	NR	0.18 J	0.12 J	0.17 J	0.13 J	0.15	0.18 J	0.12 J	0.17 J	0.13 J
Nickel	mg/kg	NR	3.6 U	3.3 U	3.3 U	4 U	3.6 U	3.6 U	3.3 U	3.3 U	4 U
Potassium	mg/kg	NR	3400	3300	3500	3800	3500	3400	3300	3500	3800
Selenium	mg/kg	NR	2.6 U	0.83 U	0.83 U	1 U	1.3 U	2.6 U	0.83 U	0.83 U	1 U
Silver	mg/kg	NR	0.91 U	0.57 J	0.83 U	1 U	0.49	0.91 U	0.57 J	0.83 U	1 U
Sodium	mg/kg	NR	360	290	280	330	315	360	290	280	330
Thallium	mg/kg	NR	0.91 U	0.83 U	0.83 U	1 U	0.89 U	0.91 U	0.83 U	0.83 U	1 U
Vanadium	mg/kg	NR	0.91 U	0.83 U	0.83 U	1 U	0.89 U	0.91 U	0.83 U	0.83 U	1 U
Zinc	mg/kg	NR	87 J	48 J	57 J	56 J	62	87 J	48 J	57 J	56 J

NOTES:
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UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
NA - Not applicable
NR - Not analyzed
R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte could not be determined.

Adjusted data - Chemical analysis was not completed for all fractions of all samples (e.g., PCB homologs for IN OS1). In such cases, an average for each compound was calculated from samples where analysis did occur for that fraction (e.g., PCB homologs for IN P1, IN Q1, IN Q2, IN ROS1), using ½ the detection limit for non-detected compounds (unless all samples were undetected, in that case the average value was calculated as the average of the detection limits listed and was given a laboratory indicator of "U"). This averaged value was then used in the foodchain modeling equations.

Table III-A9
River Whole-Body Fish Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID / Sample Date / Percent Lipids	Whole-Body Fish Tissue - Misssissippi River														
		Upstream			Adjacent									Downstream		
		UDA Channel Catfish-Comp#1 10/26/00 9.0	UDA Drum Comp 11/02/00 10	UDA-UE Comp Shad 10/27/00 6.0	PDA Channel Catfish-Comp#1 11/02/00 6.0	PDA Channel Catfish-Comp#2 10/27/00 10	PDA Channel Catfish-Comp#3 11/03/00 7.0	PDA Comp#1 Shad 10/27/00 17	PDA Comp#2 Shad 10/27/00 15	PDA Comp#3 Shad 10/27/00 13	PDA Drum Comp#1 11/02/00 3.0	PDA Drum Comp#2 11/02/00 3.0	PDA Drum-Comp#4 11/03/00 13	DDA Channel Catfish-Comp#1 11/02/00 14	DDA Comp Shad 10/25/00 3.0	DDA Drum-Comp#1 10/27/00 3.0
SVOCs																
1,2,4-Trichlorobenzene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
1,2-Dichlorobenzene	ug/kg	510 U	510 U	510 U	510 U	210 J	510 U	190 J	240 J	140 J	510 U	510 U	510 U	510 U	510 U	510 U
1,3-Dichlorobenzene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
1,4-Dichlorobenzene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	130 J	510 U	510 U	510 U	510 U	510 U	510 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
2,4,5-Trichlorophenol	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
2,4,6-Trichlorophenol	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
2,4-Dichlorophenol	ug/kg	510 U	510 U	510 U	510 U	190 J	510 U	180 J	140 J	510 U	510 U	510 U	510 U	510 U	510 U	510 U
2,4-Dimethylphenol	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
2,4-Dinitrophenol	ug/kg	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U
2,4-Dinitrotoluene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
2,6-Dinitrotoluene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
2-Chloronaphthalene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
2-Chlorophenol	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
2-Methylnaphthalene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
2-Methylphenol (o-Cresol)	ug/kg	510 U	510 U	110 J	510 U	180 J	510 U	510 U	510 U	140 J	180 J	220 J	510 U	340 J	320 J	290 J
2-Nitroaniline	ug/kg	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U
2-Nitrophenol	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
3,3'-Dichlorobenzidine	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
3-Nitroaniline	ug/kg	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U
4,6-Dinitro-2-methylphenol	ug/kg	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U
4-Bromophenyl Phenyl Ether	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
4-Chloro-3-methylphenol	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
4-Chloroaniline	ug/kg	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U	990 U
4-Chlorophenyl Phenyl Ether	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
4-Nitroaniline	ug/kg	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U
4-Nitrophenol	ug/kg	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U
Acenaphthene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Acenaphthylene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Anthracene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Benzo(a)anthracene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Benzo(a)pyrene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Benzo(b)fluoranthene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Benzo(g,h,i)perylene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Benzo(k)fluoranthene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
bis(2-Chloroethoxy)methane	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
bis(2-Chloroethyl)ether	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
bis(2-Ethylhexyl)phthalate	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Butyl Benzyl Phthalate	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Carbazole	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Chrysene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Dibenzo(a,h)anthracene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Dibenzofuran	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Diethyl Phthalate	ug/kg	510 U	110 J	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Dimethyl Phthalate	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Di-n-butylphthalate	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Di-n-octylphthalate	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Fluoranthene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Fluorene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Hexachlorobenzene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Hexachlorobutadiene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Hexachlorocyclopentadiene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Hexachloroethane	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Indeno(1,2,3-cd)pyrene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Isophorone	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Naphthalene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Nitrobenzene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
N-Nitroso-di-n-propylamine	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
N-Nitrosodiphenylamine	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Pentachlorophenol	ug/kg	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U
Phenanthrene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Phenol	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U
Pyrene	ug/kg	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U	510 U

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table III-A9
River Whole-Body Fish Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID / Sample Date / Percent Lipids	Whole-Body Fish Tissue - Misssissippi River														
		Upstream			Adjacent									Downstream		
		UDA Channel Catfish-Comp#1 10/26/00 9.0	UDA Drum Comp 11/02/00 10	UDA-UE Comp Shad 10/27/00 6.0	PDA Channel Catfish-Comp#1 11/02/00 6.0	PDA Channel Catfish-Comp#2 10/27/00 10	PDA Channel Catfish-Comp#3 11/03/00 7.0	PDA Comp#1 Shad 10/27/00 17	PDA Comp#2 Shad 10/27/00 15	PDA Comp#3 Shad 10/27/00 13	PDA Drum Comp#1 11/02/00 3.0	PDA Drum Comp#2 11/02/00 3.0	PDA Drum-Comp#4 11/03/00 13	DDA Channel Catfish-Comp#1 11/02/00 14	DDA Comp Shad 10/25/00 3.0	DDA Drum-Comp#1 10/27/00 3.0
Pesticides																
4,4'-DDD	ug/kg	50 U	25 U	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	6.6 J	25 U	6.7 J	50 U	25 UJ	12 J
4,4'-DDE	ug/kg	50 U	25 J	13 J	15 J	20 J	26	25 UJ	5.4 J	5.8 J	13 J	8 J	60	16 J	5.2 J	19 J
4,4'-DDT	ug/kg	50 U	7.6 J	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	25 U	25 U	13 J	50 U	25 UJ	25 U
Aldrin	ug/kg	50 U	25 U	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	25 U	25 U	25 U	50 U	25 UJ	25 U
alpha-BHC	ug/kg	50 U	25 U	25 U	25 U	25 U	25 U	2.6 J	25 U	25 U	25 U	25 U	25 U	50 U	25 UJ	25 U
alpha-Chlordane	ug/kg	50 U	25 U	25 U	25 U	3.8 J	25 U	25 UJ	25 U	25 U	25 U	25 U	14 J	7.7 J	25 UJ	25 U
beta-BHC	ug/kg	50 U	25 U	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	25 U	25 U	25 U	50 U	25 UJ	25 U
delta-BHC	ug/kg	50 U	25 U	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	25 U	25 U	25 U	50 U	25 UJ	25 U
Dieldrin	ug/kg	50 U	32 J	6.7 J	7.2 J	9.5 J	11 J	25 UJ	4.3 J	25 U	6.7 J	6.2 J	64 J	19 J	14 J	8.8 J
Endosulfan I	ug/kg	50 U	3 J	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	25 U	25 U	4.3 J	50 U	25 UJ	25 U
Endosulfan II	ug/kg	50 U	25 U	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	25 U	25 U	25 U	50 U	25 UJ	25 U
Endosulfan Sulfate	ug/kg	50 U	25 U	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	25 U	25 U	25 U	50 U	12 J	25 U
Endrin	ug/kg	50 U	25 U	25 U	25 U	15 J	25 U	25 UJ	25 U	25 U	25 U	25 U	7.5 J	50 U	25 UJ	25 U
Endrin Aldehyde	ug/kg	50 U	7.4 J	5.1 J	25 U	6.4 J	25 U	25 UJ	25 U	25 U	25 U	25 U	10 J	50 U	25 UJ	4.9 J
Endrin Ketone	ug/kg	50 U	25 U	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	25 U	25 U	25 U	50 U	25 UJ	25 U
gamma-BHC (Lindane)	ug/kg	50 U	25 U	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	25 U	25 U	25 U	50 U	25 UJ	25 U
gamma-Chlordane	ug/kg	50 U	5.8 J	25 U	25 U	25 U	3.4 J	25 UJ	25 U	25 U	25 U	25 U	8.1 J	50 U	25 UJ	3.5 J
Heptachlor	ug/kg	50 U	25 U	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	25 U	25 U	25 U	50 U	25 UJ	25 U
Heptachlor Epoxide	ug/kg	50 U	25 U	25 U	25 U	3.4 J	25 U	25 UJ	25 U	25 U	25 U	25 U	5.3 J	50 U	25 UJ	25 U
Methoxychlor	ug/kg	200 U	100 U	100 U	100 U	100 U	100 U	100 UJ	100 U	100 U	100 U	100 U	100 U	200 U	100 UJ	100 U
Toxaphene	ug/kg	1700 U	850 U	850 U	850 U	850 U	850 U	850 UJ	850 U	850 U	850 U	850 U	850 U	1700 U	850 UJ	850 U
Herbicides																
2,4-D	ug/kg	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
2,4-DB	ug/kg	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
2,4,5-T	ug/kg	8.3 U	7.1 J	8.3 U	6.3 J	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	13 J	7.5 J	8.3 U	8.3 U	8.3 U	8.3 U
2,4,5-TP (Silvex)	ug/kg	8.3 U	7.5 J	8.3 U	3.9 J	8.3 U	8.3 U	4.9 J	8.7	8.3 U	6.4 J	3.3 J	8.3 U	8.3 U	3.9 J	6.9 J
Dalapon	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
Dicamba	ug/kg	6.5 J	5.2 J	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Dichlorprop	ug/kg	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Dinoseb	ug/kg	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
MCPA	ug/kg	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
MCPP	ug/kg	2000 U	2000 U	2000 U	2700 J	8600 J	2000 U	3400 J	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
PCBs	**Units**															
Decachlorobiphenyl	ug/kg	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dichlorobiphenyl	ug/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Heptachlorobiphenyl	ug/kg	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Hexachlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Monochlorobiphenyl	ug/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nonachlorobiphenyl	ug/kg	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Octachlorobiphenyl	ug/kg	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Pentachlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Tetrachlorobiphenyl	ug/kg	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Trichlorobiphenyl	ug/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PCBs	ug/kg	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dioxins/Furans																
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	pg/g	2.8	0.76 J	8.8	3 J	4.1	4	1.3 J	2 J	7.1	2.5 J	0.99 J	1.2 J	4.3	4.3	0.62 J
1,2,3,4,6,7,8-HpCDF	pg/g	0.06 UJ	0.06 UJ	0.59 J	0.04 UJ	0.08 UJ	0.03 UJ	0.05 UJ	0.07 UJ	1 J	0.08 UJ	0.06 UJ	0.05 UJ	0.05 UJ	0.1 UJ	0.05 UJ
1,2,3,4,7,8,9-HpCDF	pg/g	0.08 UJ	0.08 UJ	0.2 UJ	0.05 UJ	0.1 UJ	0.04 UJ	0.07 UJ	0.09 UJ	0.03 UJ	0.1 UJ	0.07 UJ	0.07 UJ	0.07 UJ	0.2 UJ	0.07 UJ
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	0.33 J	0.07 UJ	0.3 J	0.29 J	0.3 J	0.3 J	0.1 U	0.08 UJ	0.18 J	0.1 UJ	0.06 UJ	0.06 UJ	0.58 J	0.1 UJ	0.06 UJ
1,2,3,4,7,8-HxCDF	pg/g	0.42 J	0.51 J	0.85 J	0.29 UJ	0.43 J	0.28 U	0.25 U	0.84 J	0.46 J	0.45 J	0.2 U	0.47 J	0.71 J	0.37 U	0.14 U
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	1.3 J	0.36 J	1.8 J	1.1 J	1.2 J	1.1 J	0.45 J	0.82 J	1.1 J	0.84 J	0.43 J	0.58 J	2 J	0.37 J	0.34 J
1,2,3,6,7,8-HxCDF	pg/g	0.19 J	0.26 J	0.08 UJ	0.11 UJ	0.17 J	0.1 UJ	0.07 U	0.05 UJ	0.19 J	0.22 J	0.11 U	0.16 J	0.34 J	0.08 UJ	0.04 UJ
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	pg/g	0.51 J	0.2 J	1.1 J	0.37 J	0.58 J	0.56 J	0.24 J	0.39 J	0.54 J	0.38 J	0.24 J	0.29 J	0.78 J	0.26 J	0.2 J
1,2,3,7,8,9-HxCDF	pg/g	0.07 UJ	0.06 UJ	0.1 UJ	0.04 UJ	0.08 UJ	0.03 UJ	0.06 UJ	0.07 UJ	0.02 UJ	0.08 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.1 UJ	0.05 UJ
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	0.06 UJ	0.05 UJ	0.09 UJ	0.03 UJ	0.07 UJ	0.03 UJ	0.13 UJ	0.06 UJ	0.43 J	0.07 UJ	0.04 UJ	0.04 UJ	0.04 UJ	0.09 UJ	0.04 UJ
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	pg/g	0.61 J	0.06 UJ	1 J	0.47 J	0.64 J	0.42 J	0.32 J	0.46 J	0.51 J	0.09 UJ	0.06 UJ	0.1 J	1.2 J	0.24 J	0.05 UJ
2,3,4,6,7,8-HxCDF	pg/g	0.27 J	0.15 U	0.3 J	0.13 UJ	0.22 J	0.16 J	0.12 U	0.48 J	0.3 J	0.24 J	0.11 U	0.16 J	0.86 J	0.18 J	0.2 J
2,3,4,7,8-PeCDF	pg/g	0.59 J	0.05 UJ	0.25 J	0.52 J	0.64 J	0.35 J	0.19 J	0.41 J	0.55 J	0.07 UJ	0.04 UJ	0.13 J	1 J	0.21 J	0.04 UJ
2,3,7,8-TCDD	pg/g	0.53	0.17 J	1.1	0.6	0.83	0.37 J	0.28 J	2.4	0.57	0.14 UJ	0.05 UJ	0.14 U	0.96	0.34 J	0.05 UJ
2,3,7,8-Tetrachlorodibenzofuran	pg/g	0.35 J	1 J	2.6	0.35 J	1.2	0.54	0.92	1.9	5.7	0.44 J	0.29 J	1.3 J	0.53	1	0.33 J
OCDD	pg/g	8.1 J	4.8 J	79.7	7.7 J	9	10.6	6.8	15.1	189 J	16.5	5.3	6.8	11.3	119	4.5 J
OCDF	pg/g	0.32 UJ	0.28 U	1.2 U	0.21 UJ	0.23 U	0.23 U	0.72 U	0.25 U	4.3 J	1.5 U	0.1 UJ	0.43 U	0.34 UJ	2.7 J	0.1 U
Total HpCDD	pg/g	3.1	1	12.4	3.2 J	4.3	4.2	1.6	2.6	13.5	3.6	1.2	1.9	4.6	8.5	0.75
Total HpCDF	pg/g	2.2 J	2.9 J	4.5 J	0.83 J	0.09 UJ	2.1 J	0.5 J	13.6 J	6.1 J	6.1 J	2.3 J	1.4 J	5.3 J	3.1 J	8.5 J
Total HxCDD	pg/g	2.6 J	1.3 U	4.9 J	2.2 J	2.6 J	2.4 J	1.3 UJ	1.7 J	3.3 J	2.3 J	1.2 UJ	2.9 J	3.9 J	1.3 UJ	0.96 UJ
Total HxCDF	pg/g	18.9 J	18.4 J	21.2 J	8.3 J	7.7 J	15.3 J	5 J	81.6 J	16 J	27 J	10.6 J	13 J	42.1 J	12.1 J	38.5 J
Total PeCDD	pg/g	1.9 J	2.2 J	3 J	1.8 J	3.3 J	1.9 J	2.5 J	3.4 J	3.1 J	1.9 J	1.5 J	7.5 J	3.2 J	2.6 J	1.1 J
Total PeCDF	pg/g	47.8 J	49.4 J	125 J	21.5 J	31.4 J	41.8 J	29.9 J	124 J	33.1 J	40.6 J	22.1 J	43.2 J	93.9 J	24.7 J	62 J
Total TCDD	pg/g	0.62 J	0.75 J	1.5	0.87 J	1.1 J	0.68 J	2.8 J	3.3 J	5.9 J	0.38 UJ	0.17 UJ	7.2 J	1.4 J	0.61 J	0.13 UJ
Total TCDF	pg/g	121 J	84.2 J	67 J	45.9 J	60.6 J	105 J	35.1 J	187 J	72.7 J	64.6 J	46 J	79.3 J	216 J	30 J	128 J

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table III-A10
Pond Whole-Body Fish Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID Sample Date Percent Lipids	Whole-Body Fish Tissue - Pond Blue Gill 11/18/02 6.8
SVOCs	**Units**	
1,2,4-Trichlorobenzene	ug/kg	990 U
1,2-Dichlorobenzene	ug/kg	990 U
1,3-Dichlorobenzene	ug/kg	990 U
1,4-Dichlorobenzene	ug/kg	990 U
2,2'-Oxybis(1-Chloropropane)	ug/kg	990 U
2,4,5-Trichlorophenol	ug/kg	990 U
2,4,6-Trichlorophenol	ug/kg	990 U
2,4-Dichlorophenol	ug/kg	990 U
2,4-Dimethylphenol	ug/kg	990 U
2,4-Dinitrophenol	ug/kg	5100 UJ
2,4-Dinitrotoluene	ug/kg	990 U
2,6-Dinitrotoluene	ug/kg	990 U
2-Chloronaphthalene	ug/kg	990 U
2-Chlorophenol	ug/kg	990 U
2-Methylnaphthalene	ug/kg	990 U
2-Methylphenol (o-Cresol)	ug/kg	990 U
2-Nitroaniline	ug/kg	5100 UJ
2-Nitrophenol	ug/kg	990 U
3,3'-Dichlorobenzidine	ug/kg	2000 U
3/4-Methylphenol (m&p-Cresol)	ug/kg	990 U
3-Nitroaniline	ug/kg	5100 UJ
4,6-Dinitro-2-methylphenol	ug/kg	5100 U
4-Bromophenyl Phenyl Ether	ug/kg	990 U
4-Chloro-3-methylphenol	ug/kg	990 U
4-Chloroaniline	ug/kg	2000 U
4-Chlorophenyl Phenyl Ether	ug/kg	990 U
4-Nitroaniline	ug/kg	5100 U
4-Nitrophenol	ug/kg	5100 U
Acenaphthene	ug/kg	990 U
Acenaphthylene	ug/kg	990 U
Anthracene	ug/kg	990 U
Benzo(a)anthracene	ug/kg	990 U
Benzo(a)pyrene	ug/kg	990 U
Benzo(b)fluoranthene	ug/kg	990 U
Benzo(g,h,i)perylene	ug/kg	990 U
Benzo(k)fluoranthene	ug/kg	990 U
bis(2-Chloroethoxy)methane	ug/kg	990 U
bis(2-Chloroethyl)ether	ug/kg	990 U
bis(2-Ethylhexyl)phthalate	ug/kg	990 U
Butyl Benzyl Phthalate	ug/kg	990 U
Carbazole	ug/kg	990 U
Chrysene	ug/kg	990 U
Dibenzo(a,h)anthracene	ug/kg	990 U
Dibenzofuran	ug/kg	990 U
Diethyl Phthalate	ug/kg	990 U
Dimethyl Phthalate	ug/kg	990 U
Di-n-butylphthalate	ug/kg	990 U
Di-n-octylphthalate	ug/kg	990 U

Analyte	Sample ID Sample Date Percent Lipids	Whole-Body Fish Tissue - Pond Blue Gill 11/18/02 6.8
SVOCs	**Units**	
Fluoranthene	ug/kg	990 U
Fluorene	ug/kg	990 U
Hexachlorobenzene	ug/kg	990 U
Hexachlorobutadiene	ug/kg	990 U
Hexachlorocyclopentadiene	ug/kg	990 U
Hexachloroethane	ug/kg	990 U
Indeno(1,2,3-cd)pyrene	ug/kg	990 U
Isophorone	ug/kg	990 U
Naphthalene	ug/kg	990 U
Nitrobenzene	ug/kg	990 U
N-Nitroso-di-n-propylamine	ug/kg	990 U
N-Nitrosodiphenylamine	ug/kg	990 U
Pentachlorophenol	ug/kg	51 U
Phenanthrene	ug/kg	990 U
Phenol	ug/kg	990 U
Pyrene	ug/kg	990 U
Pesticides		
4,4'-DDD	ug/kg	9.9 U
4,4'-DDE	ug/kg	9.9 U
4,4'-DDT	ug/kg	40 UJ
Aldrin	ug/kg	5.1 U
alpha-BHC	ug/kg	5.1 U
alpha-Chlordane	ug/kg	5.1 U
beta-BHC	ug/kg	5.1 U
delta-BHC	ug/kg	24
Dieldrin	ug/kg	140
Endosulfan I	ug/kg	5.1 U
Endosulfan II	ug/kg	9.9 U
Endosulfan Sulfate	ug/kg	9.9 U
Endrin	ug/kg	9.9 U
Endrin Aldehyde	ug/kg	9.9 U
Endrin Ketone	ug/kg	3.6 J
gamma-BHC (Lindane)	ug/kg	5.1 U
gamma-Chlordane	ug/kg	5.1 U
Heptachlor	ug/kg	5.1 U
Heptachlor Epoxide	ug/kg	5.1 U
Methoxychlor	ug/kg	51 U
Toxaphene	ug/kg	510 U
Herbicides		
2,4-D	ug/kg	25 U
2,4-DB	ug/kg	25 U
2,4,5-T	ug/kg	25 U
2,4,5-TP (Silvex)	ug/kg	25 U
Dalapon	ug/kg	6000 U
Dicamba	ug/kg	60 U
Dichlorprop	ug/kg	300 U
Dinoseb	ug/kg	990 UJ
MCPA	ug/kg	6000 U
MCPP	ug/kg	6000 U

Analyte	Sample ID Sample Date Percent Lipids	Whole-Body Fish Tissue - Pond Blue Gill 11/18/02 6.8
PCBs	**Units**	
Decachlorobiphenyl	ug/kg	50 U
Dichlorobiphenyl	ug/kg	10 U
Heptachlorobiphenyl	ug/kg	640
Hexachlorobiphenyl	ug/kg	1900
Monochlorobiphenyl	ug/kg	10 U
Nonachlorobiphenyl	ug/kg	50 U
Octachlorobiphenyl	ug/kg	85
Pentachlorobiphenyl	ug/kg	3300
Tetrachlorobiphenyl	ug/kg	2400
Trichlorobiphenyl	ug/kg	120
Total PCBs	ug/kg	8445
Dioxins/Furans		
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	pg/g	24
1,2,3,4,6,7,8-HpCDF	pg/g	0.83 U
1,2,3,4,7,8,9-HpCDF	pg/g	1.1 U
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	1.9 U
1,2,3,4,7,8-HxCDF	pg/g	0.82 U
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	2.1 U
1,2,3,6,7,8-HxCDF	pg/g	0.66 U
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	pg/g	1.6 U
1,2,3,7,8,9-HxCDF	pg/g	1.1 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	2.4 U
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	pg/g	2.2 U
2,3,4,6,7,8-HxCDF	pg/g	0.85 U
2,3,4,7,8-PeCDF	pg/g	4 U
2,3,7,8-TCDD	pg/g	1.4 J
2,3,7,8-Tetrachlorodibenzofuran	pg/g	56
OCDD	pg/g	50
OCDF	pg/g	1.7 U
Total HpCDD	pg/g	35
Total HpCDF	pg/g	1.1 U
Total HxCDD	pg/g	3.2 U
Total HxCDF	pg/g	1.7 U
Total PeCDD	pg/g	2.2 U
Total PeCDF	pg/g	14
Total TCDD	pg/g	1.4 J
Total TCDF	pg/g	98
Metals		
Aluminum	mg/kg	16 J
Antimony	mg/kg	1.8 U
Arsenic	mg/kg	0.73 J
Barium	mg/kg	5.3
Beryllium	mg/kg	0.36 U
Cadmium	mg/kg	0.45 UJ
Calcium	mg/kg	12000 J
Chromium	mg/kg	0.33 J
Cobalt	mg/kg	0.91 U
Copper	mg/kg	0.91 J
Iron	mg/kg	57
Lead	mg/kg	0.45 U
Magnesium	mg/kg	430
Manganese	mg/kg	9.9
Mercury	mg/kg	0.062
Nickel	mg/kg	3.6 U
Potassium	mg/kg	2800
Selenium	mg/kg	0.91 UJ
Silver	mg/kg	0.91 U
Sodium	mg/kg	920
Thallium	mg/kg	0.91 UJ
Vanadium	mg/kg	0.91 U
Zinc	mg/kg	46

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
UJ = The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table III-A11
Clam Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID			Large Pond			Small Pond		
	Sample Date	Sauget #6 (Control) 7/24/2003	Sauget Bioaccum Day 0 6/26/2003	Sauget #1 7/24/2003	Sauget #2 7/24/2003	Sauget #3 7/24/2003	Sauget #4 7/24/2003	Sauget #5 7/24/2003	Sauget #7 7/24/2003
	Percent Lipids	2.9	2.4	0.10 U	4.7	3.3	0.70	3.9	2.9
SVOCs									
1,2,4-Trichlorobenzene	ug/kg	990	990	990	990	990	990	990	990
1,2-Dichlorobenzene	ug/kg	990	990	990	990	990	990	990	990
1,3-Dichlorobenzene	ug/kg	990	990	990	990	990	990	990	990
1,4-Dichlorobenzene	ug/kg	990	990	990	990	990	990	990	990
2,2'-Oxybis(1-Chloropropane)	ug/kg	990	990	990	990	990	990	990	990
2,4,5-Trichlorophenol	ug/kg	990	990	990	990	990	990	990	990
2,4,6-Trichlorophenol	ug/kg	990	990	990	990	990	990	990	990
2,4-Dichlorophenol	ug/kg	990	990	990	990	990	990	990	990
2,4-Dimethylphenol	ug/kg	990	990	990	990	990	990	990	990
2,4-Dinitrophenol	ug/kg	5100	5100	5100	5100	5100	5100	5100	5100
2,4-Dinitrotoluene	ug/kg	990	990	990	990	990	990	990	990
2,6-Dinitrotoluene	ug/kg	990	990	990	990	990	990	990	990
2-Chloronaphthalene	ug/kg	990	990	990	990	990	990	990	990
2-Chlorophenol	ug/kg	990	990	990	990	990	990	990	990
2-Methylnaphthalene	ug/kg	990	990	990	990	990	990	990	990
2-Methylphenol (o-Cresol)	ug/kg	990	990	990	990	990	990	990	990
2-Nitroaniline	ug/kg	5100	5100	5100	5100	5100	5100	5100	5100
2-Nitrophenol	ug/kg	990	990	990	990	990	990	990	990
3,3'-Dichlorobenzidine	ug/kg	2000	2000	2000	2000	2000	2000	2000	2000
3/4-Methylphenol (m&p-Cresol)	ug/kg	990	990	990	990	990	990	990	990
3-Nitroaniline	ug/kg	5100	5100	5100	5100	5100	5100	5100	5100
4,6-Dinitro-2-methylphenol	ug/kg	5100	5100	5100	5100	5100	5100	5100	5100
4-Bromophenyl Phenyl Ether	ug/kg	990	990	990	990	990	990	990	990
4-Chloro-3-methylphenol	ug/kg	990	990	990	990	990	990	990	990
4-Chloroaniline	ug/kg	2000	2000	2000	2000	2000	2000	2000	2000
4-Chlorophenyl Phenyl Ether	ug/kg	990	990	990	990	990	990	990	990
4-Nitroaniline	ug/kg	5100	5100	5100	5100	5100	5100	5100	5100
4-Nitrophenol	ug/kg	5100	5100	5100	5100	5100	5100	5100	5100
Acenaphthene	ug/kg	990	990	990	990	990	990	990	990
Acenaphthylene	ug/kg	990	990	990	990	990	990	990	990
Anthracene	ug/kg	990	990	990	990	990	990	990	990
Benzo(a)anthracene	ug/kg	990	990	990	990	990	990	990	990
Benzo(a)pyrene	ug/kg	990	990	990	990	990	990	990	990

NOTES:
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Table III-A11
Clam Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID			Large Pond			Small Pond		
	Sample ID	Sauget #6 (Control)	Sauget Bioaccum Day 0	Sauget #1	Sauget #2	Sauget #3	Sauget #4	Sauget #5	Sauget #7
	Sample Date	7/24/2003	6/26/2003	7/24/2003	7/24/2003	7/24/2003	7/24/2003	7/24/2003	7/24/2003
	Percent Lipids	2.9	2.4	0.10 U	4.7	3.3	0.70	3.9	2.9
SVOCs (Cont.)									
Benzo(b)fluoranthene	ug/kg	990	990	990	990	990	990	990	990
Benzo(g,h,i)perylene	ug/kg	990	990	990	990	990	990	990	990
Benzo(k)fluoranthene	ug/kg	990	990	990	990	990	990	990	990
bis(2-Chloroethoxy)methane	ug/kg	990	990	990	990	990	990	990	990
bis(2-Chloroethyl)ether	ug/kg	990	990	990	990	990	990	990	990
bis(2-Ethylhexyl)phthalate	ug/kg	520	350	400	450	380	430	480	**550**
Butyl Benzyl Phthalate	ug/kg	990	990	990	990	990	990	990	990
Carbazole	ug/kg	990	990	990	990	990	990	990	990
Chrysene	ug/kg	990	990	990	990	990	990	990	990
Dibenzo(a,h)anthracene	ug/kg	990	990	990	990	990	990	990	990
Dibenzofuran	ug/kg	990	990	990	990	990	990	990	990
Diethyl Phthalate	ug/kg	990	990	990	990	990	990	990	990
Dimethyl Phthalate	ug/kg	990	990	990	990	990	990	990	990
Di-n-butylphthalate	ug/kg	990	990	990	990	990	990	990	990
Di-n-octylphthalate	ug/kg	990	990	990	990	990	990	100	990
Fluoranthene	ug/kg	990	990	990	990	990	990	990	990
Fluorene	ug/kg	990	990	990	990	990	990	990	990
Hexachlorobenzene	ug/kg	990	990	990	990	990	990	990	990
Hexachlorobutadiene	ug/kg	990	990	990	990	990	990	990	990
Hexachlorocyclopentadiene	ug/kg	990	990	990	990	990	990	990	990
Hexachloroethane	ug/kg	990	990	990	990	990	990	990	990
Indeno(1,2,3-cd)pyrene	ug/kg	990	990	990	990	990	990	990	990
Isophorone	ug/kg	990	990	990	990	990	990	990	990
Naphthalene	ug/kg	990	990	990	990	990	990	990	990
Nitrobenzene	ug/kg	990	990	990	990	990	990	990	990
N-Nitroso-di-n-propylamine	ug/kg	990	990	990	990	990	990	990	990
N-Nitrosodiphenylamine	ug/kg	990	990	990	990	990	990	990	990
Pentachlorophenol	ug/kg	51	51	51	51	51	51	51	51
Phenanthrene	ug/kg	990	990	990	990	990	990	990	990
Phenol	ug/kg	990	990	990	990	990	990	990	990
Pyrene	ug/kg	990	990	990	990	990	990	990	990

NOTES:
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Table III-A11
Clam Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID			Large Pond			Small Pond		
	Sample Date	Sauget #6 (Control) 7/24/2003	Sauget Bioaccum Day 0 6/26/2003	Sauget #1 7/24/2003	Sauget #2 7/24/2003	Sauget #3 7/24/2003	Sauget #4 7/24/2003	Sauget #5 7/24/2003	Sauget #7 7/24/2003
	Percent Lipids	2.9	2.4	0.10 U	4.7	3.3	0.70	3.9	2.9
Pesticides									
4,4'-DDD	ug/kg	10	10	10	10	10	10	10	10
4,4'-DDE	ug/kg	16	9	**19**	**20**	15	**23**	15	13
4,4'-DDT	ug/kg	10	10	10	10	10	10	10	10
Aldrin	ug/kg	5	5	5	5	5	5	5	5
alpha-BHC	ug/kg	5	5	5	5	5	5	5	5
alpha-Chlordane	ug/kg	5	5	5	5	5	5	5	5
beta-BHC	ug/kg	5	5	5	5	5	5	5	5
delta-BHC	ug/kg	5	5	5	5	5	5	5	5
Dieldrin	ug/kg	10	10	10	10	10	10	10	10
Endosulfan I	ug/kg	5	5	5	5	5	5	5	5
Endosulfan II	ug/kg	10	10	1.6	10	10	10	10	10
Endosulfan Sulfate	ug/kg	10	10	10	10	10	10	10	10
Endrin	ug/kg	10	10	10	10	10	10	10	10
Endrin Aldehyde	ug/kg	10	10	10	10	10	10	10	10
Endrin Ketone	ug/kg	10	10	10	10	10	10	10	10
gamma-BHC (Lindane)	ug/kg	5	5	5	5	5	5	5	5
gamma-Chlordane	ug/kg	5	5	5	5	5	5	5	5
Heptachlor	ug/kg	5	5	5	5	5	5	5	5
Heptachlor Epoxide	ug/kg	5	5	5	5	5	5	5	5
Methoxychlor	ug/kg	50	50	50	50	50	50	50	50
Toxaphene	ug/kg	500	500	500	500	500	500	500	500
Herbicides									
2,4-D	ug/kg	25	25	25	25	25	25	25	25
2,4-DB	ug/kg	25	25	25	25	25	25	25	25
2,4,5-T	ug/kg	25	25	25	25	25	25	25	25
2,4,5-TP (Silvex)	ug/kg	25	25	25	25	25	25	25	25
Dalapon	ug/kg	6000	6000	6000	6000	6000	6000	6000	6000
Dicamba	ug/kg	60	60	60	60	60	60	60	60
Dichlorprop	ug/kg	300	300	300	300	300	300	300	300
Dinoseb	ug/kg	990	990	990	990	990	990	990	990
MCPA	ug/kg	6000	6000	6000	6000	6000	6000	6000	6000
MCPP	ug/kg	6000	6000	6000	6000	6000	6000	6000	6000
PCBs	**Units**								
Decachlorobiphenyl	ug/kg	50	50	50	50	50	50	50	50
Dichlorobiphenyl	ug/kg	10	10	1.5	10	10	10	10	10
Heptachlorobiphenyl	ug/kg	30	30	30	30	30	30	30	30
Hexachlorobiphenyl	ug/kg	20	20	17	20	20	20	2.1	20
Monochlorobiphenyl	ug/kg	10	10	10	10	10	10	10	10
Nonachlorobiphenyl	ug/kg	50	50	50	50	50	50	50	50
Octachlorobiphenyl	ug/kg	30	30	30	30	30	30	30	30
Pentachlorobiphenyl	ug/kg	20	20	**90**	20	20	11	**41**	**22**
Tetrachlorobiphenyl	ug/kg	20	20	**163**	20	20	15	**78**	**29**
Trichlorobiphenyl	ug/kg	10	10	**55**	10	10	10	5.6	5.7
Total PCBs	ug/kg	250	250	**497**	250	250	236	**307**	**257**

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Table III-A11
Clam Tissue Analyte Concentrations
Sauget, IL

Analyte	Sample ID			Large Pond			Small Pond		
	Sample Date	Sauget #6 (Control) 7/24/2003	Sauget Bioaccum Day 0 6/26/2003	Sauget #1 7/24/2003	Sauget #2 7/24/2003	Sauget #3 7/24/2003	Sauget #4 7/24/2003	Sauget #5 7/24/2003	Sauget #7 7/24/2003
	Percent Lipids	2.9	2.4	0.10 U	4.7	3.3	0.70	3.9	2.9
Dioxins/Furans									
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	pg/g	0.31 U	1.9 U	2 U	**3.2 J**	**11**	**3.3 J**	**9.8**	**6.5**
1,2,3,4,6,7,8-HpCDF	pg/g	0.2 U	0.22 U	0.43 U	0.66 U	1.2 U	0.85 U	1.4 U	1 U
1,2,3,4,7,8,9-HpCDF	pg/g	0.23 U	0.26 U	0.41 U	0.36 U	0.25 U	0.24 U	0.25 U	0.22 U
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	0.37 U	0.42 U	0.73 U	0.66 U	0.37 U	0.42 U	0.38 U	0.38 U
1,2,3,4,7,8-HxCDF	pg/g	0.22 U	0.26 U	0.47 U	0.37 U	0.27 U	0.29 U	0.24 U	0.24 U
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	pg/g	0.31 U	0.41 U	0.61 U	0.55 U	0.46 U	0.45 U	0.98 U	0.99 U
1,2,3,6,7,8-HxCDF	pg/g	0.19 U	0.22 U	0.4 U	0.32 U	0.23 U	0.25 U	0.2 U	0.21 U
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	pg/g	0.32 U	0.71 U	0.63 U	0.57 U	0.32 U	0.36 U	0.39 U	0.41 U
1,2,3,7,8,9-HxCDF	pg/g	0.26 U	0.31 U	0.55 U	0.44 U	0.32 U	0.34 U	0.28 U	0.28 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	0.26 U	0.27 U	0.7 U	0.5 U	0.3 U	0.3 U	0.28 U	0.25 U
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	pg/g	0.44 U	0.48 U	1 U	0.78 U	0.48 U	0.48 U	0.5 U	0.46 U
2,3,4,6,7,8-HxCDF	pg/g	0.23 U	0.27 U	0.48 U	0.39 U	0.28 U	0.3 U	0.25 U	0.25 U
2,3,4,7,8-PeCDF	pg/g	0.26 U	0.27 U	0.7 U	0.5 U	0.3 U	0.3 U	0.28 U	0.25 U
2,3,7,8-TCDD	pg/g	0.25 U	0.25 U	0.42 U	0.36 U	0.26 U	0.26 U	0.27 U	0.23 U
2,3,7,8-Tetrachlorodibenzofuran	pg/g	0.28 U	0.21 U	**2.2**	**1.2**	**0.57 J**	0.44 U	0.43 U	0.36 U
OCDD	pg/g	2 U	20	**23**	**29**	**130**	**33**	**96**	**66**
OCDF	pg/g	0.46 U	0.54 U	0.96 U	1.6 U	**6.9 J**	2.3 U	3.3 U	2.4 U
Total HpCDD	pg/g	0.31 U	1.9 U	2 U	**5.7**	**20**	**5.9**	**17**	**13**
Total HpCDF	pg/g	0.23 U	0.26 U	0.9 U	1.2 U	**3.7**	1.5 U	**2.7**	1.9 U
Total HxCDD	pg/g	0.37 U	0.71 U	0.73 U	0.66 U	0.81 U	0.97 U	**3.0**	**3.7**
Total HxCDF	pg/g	0.26 U	0.31 U	0.55 U	0.56 U	1.1 U	0.56 U	1.1 U	0.67 U
Total PeCDD	pg/g	0.44 U	0.48 U	1 U	0.78 U	0.48 U	0.48 U	0.5 U	0.46 U
Total PeCDF	pg/g	0.35 U	0.27 U	**6.2**	2.3 U	0.92 U	0.7 U	0.44 U	0.52 U
Total TCDD	pg/g	0.25 U	0.25 U	0.74 U	0.36 U	0.28 U	0.49 U	0.27 U	0.23 U
Total TCDF	pg/g	1.2 U	0.22 U	**20**	**11**	**2.4**	0.44 U	0.43 U	**2.5**
Metals									
Aluminum	mg/kg	88	58	77	**380**	**300**	**180**	37	**120**
Antimony	mg/kg	1.8	1.8	**1.9**	0.64	1.8	1.8	0.59	0.63
Arsenic	mg/kg	0.74	0.90	**0.93**	**0.81**	**0.91**	**1.3**	**0.81**	**0.91**
Barium	mg/kg	8	43	**50**	**58**	**64**	**26**	**24**	**38**
Beryllium	mg/kg	0.36	0.36	**0.37**	**0.37**	0.36	0.36	0.35	0.36
Cadmium	mg/kg	0.45	0.45	**0.46**	**0.46**	0.45	0.45	0.44	0.45
Calcium	mg/kg	33000	130000	**230000**	**230000**	**210000**	**65000**	**91000**	**160000**
Chromium	mg/kg	0.99	1.8	0.53	**2.6**	**2.9**	**1.2**	**1.5**	**2.7**
Cobalt	mg/kg	0.89	0.16	**0.93**	0.32	0.26	0.18	0.88	0.15
Copper	mg/kg	7.8	7.1	4.6	**8.8**	5.6	6	6.8	5.7
Iron	mg/kg	130	120	**160**	**470**	**380**	**240**	81	**180**
Lead	mg/kg	0.56	0.68	0.42	**0.60**	0.50	0.52	**0.60**	**0.63**
Magnesium	mg/kg	150	94	89	**210**	**180**	**200**	120	120
Manganese	mg/kg	6.6	15	**22**	**23**	**27**	**15**	**16**	**18**
Mercury	mg/kg	0.019	0.018	0.018	0.018	0.019	**0.020**	0.018	0.019
Nickel	mg/kg	0.50	0.53	**0.51**	**1.9**	**1.4**	**1.0**	0.42	**0.78**
Potassium	mg/kg	190	180	140	180	190	**210**	190	180
Selenium	mg/kg	0.89	0.90	**0.93**	**0.92**	**0.91**	0.89	0.88	**0.91**
Silver	mg/kg	0.89	0.90	**0.93**	**0.92**	**0.91**	0.89	0.88	**0.91**
Sodium	mg/kg	550	1400	**2100**	**2300**	**1900**	**860**	**1100**	**1500**
Thallium	mg/kg	0.89	0.90	**0.93**	**0.92**	**0.91**	0.89	0.88	**0.91**
Vanadium	mg/kg	0.36	0.25	0.32	**0.98**	**0.86**	**0.67**	0.25	**0.42**
Zinc	mg/kg	16	12	7.6	12	8.2	16	14	10

NOTES:
U = Not detected at the MDL.
J = The concentration was detected at a value below the MDL.
Bold = A detected value above the Control concentration
Shaded = A detected value significantly higher than the Control concentration (by at least a factor of five) OR a detected value associated with an undetected Control concentration.

Appendix III-B

Food Chain Modeling Calculations

Table III-B1
Estimated Concentrations Within the Vole Calculations
Off-Site
Sauget, IL

Analyte	Plant Average Value (mg/kg)	BCF_{P-M}	Calculated Concentration (mg/kg)	Vole ADD (mg/kg-day)	Estimated Concentration Within the Vole (mg/kg)
SVOCs					
1,2,4-Trichlorobenzene				***5.0E-02***	***5.0E-02***
1,2-Dichlorobenzene				***5.0E-02***	***5.0E-02***
1,3-Dichlorobenzene				***5.0E-02***	***5.0E-02***
1,4-Dichlorobenzene				***5.0E-02***	***5.0E-02***
2,2'-Oxybis(1-Chloropropane)				***5.0E-02***	***5.0E-02***
2,4,5-Trichlorophenol				***5.0E-02***	***5.0E-02***
2,4,6-Trichlorophenol				***5.0E-02***	***5.0E-02***
2,4-Dichlorophenol				***5.0E-02***	***5.0E-02***
2,4-Dinitrophenol				***2.6E-01***	***2.6E-01***
2,4-Dinitrotoluene	***5.0E-01***	1.5E-06	***7.4E-07***	***5.0E-02***	***7.4E-07***
2,6-Dinitrotoluene	***5.0E-01***	1.2E-06	***5.7E-07***	***5.0E-02***	***5.7E-07***
2-Chloronaphthalene				***5.0E-02***	***5.0E-02***
2-Chlorophenol				***5.0E-02***	***5.0E-02***
2-Methylnaphthalene				***5.0E-02***	***5.0E-02***
2-Methylphenol (o-Cresol)				***5.0E-02***	***5.0E-02***
2-Nitroaniline				***2.6E-01***	***2.6E-01***
2-Nitrophenol				***5.0E-02***	***5.0E-02***
3,3'-Dichlorobenzidine				***1.0E-01***	***1.0E-01***
3/4-Methylphenol (m&p-Cresol)				***5.0E-02***	***5.0E-02***
3-Nitroaniline				***2.6E-01***	***2.6E-01***
4,6-Dinitro-2-methylphenol				***2.6E-01***	***2.6E-01***
4-Bromophenyl Phenyl Ether				***5.0E-02***	***5.0E-02***
4-Chloro-3-methylphenol				***5.0E-02***	***5.0E-02***
4-Chloroaniline				***1.0E-01***	***1.0E-01***
4-Chlorophenyl Phenyl Ether				***5.0E-02***	***5.0E-02***
4-Nitroaniline				***2.6E-01***	***2.6E-01***
4-Nitrophenol				***2.6E-01***	***2.6E-01***
Acenaphthene				***5.0E-02***	***5.0E-02***
Acenaphthylene				***5.0E-02***	***5.0E-02***
Anthracene				***5.0E-02***	***5.0E-02***
Benzo(a)anthracene	***5.0E-01***	7.2E-03	***3.6E-03***	5.0E-02	***3.6E-03***
Benzo(a)pyrene	***5.0E-01***	2.0E-02	***1.0E-02***	***5.0E-02***	***1.0E-02***
Benzo(b)fluoranthene	***5.0E-01***	2.4E-02	***1.2E-02***	5.0E-02	***1.2E-02***
Benzo(g,h,i)perylene				***5.0E-02***	***5.0E-02***
Benzo(k)fluoranthene	***5.0E-01***	2.4E-02	***1.2E-02***	5.0E-02	***1.2E-02***
bis(2-Chloroethoxy)methane				***5.0E-02***	***5.0E-02***
bis(2-Chloroethyl)ether				***5.0E-02***	***5.0E-02***
bis(2-Ethylhexyl)phthalate	***5.0E-01***	2.4E-03	***1.2E-03***	5.0E-02	***1.2E-03***
Butyl Benzyl Phthalate				***5.0E-02***	***5.0E-02***
Carbazole				***5.0E-02***	***5.0E-02***
Chrysene	***5.0E-01***	8.3E-03	***4.1E-03***	5.0E-02	***4.1E-03***
Dibenzo(a,h)anthracene	***5.0E-01***	5.3E-02	***2.6E-02***	***5.0E-02***	***2.6E-02***
Dibenzofuran				***5.0E-02***	***5.0E-02***
Diethyl Phthalate				***5.0E-02***	***5.0E-02***
Dimethyl Phthalate				***5.0E-02***	***5.0E-02***
Di-n-butylphthalate				***5.0E-02***	***5.0E-02***
Di-n-octylphthalate	***5.0E-01***	3.2E+01	***1.6E+01***	***5.0E-02***	***1.6E+01***
Fluoranthene				5.0E-02	5.0E-02
Fluorene				***5.0E-02***	***5.0E-02***
Hexachlorobenzene	***5.0E-01***	4.8E-03	***2.4E-03***	***5.0E-02***	***2.4E-03***
Hexachlorobutadiene	***5.0E-01***	8.1E-04	***4.0E-04***	***5.0E-02***	***4.0E-04***
Hexachlorocyclopentadiene	***5.0E-01***	1.2E-03	***6.0E-04***	***5.0E-02***	***6.0E-04***
Hexachloroethane				***5.0E-02***	***5.0E-02***
Indeno(1,2,3-cd)pyrene	***5.0E-01***	1.2E-01	***6.1E-02***	***5.0E-02***	***6.1E-02***
Isophorone				***5.0E-02***	***5.0E-02***
Naphthalene				***5.0E-02***	***5.0E-02***
Nitrobenzene	***5.0E-01***	1.0E-06	***5.1E-07***	***5.0E-02***	***5.1E-07***
N-Nitroso-di-n-propylamine				***5.0E-02***	***5.0E-02***
N-Nitrosodiphenylamine				***5.0E-02***	***5.0E-02***
Pentachlorophenol	***8.7E-01***	1.8E-03	***1.6E-03***	8.7E-02	***1.6E-03***
Phenanthrene				5.0E-02	5.0E-02
Phenol				***5.0E-02***	***5.0E-02***
Pyrene				5.0E-02	5.0E-02

Table III-B1
Estimated Concentrations Within the Vole Calculations
Off-Site
Sauget, IL

Analyte	Plant Average Value (mg/kg)	BCF_{P-M}	Calculated Concentration (mg/kg)	Vole ADD (mg/kg-day)	Estimated Concentration Within the Vole (mg/kg)
Pesticides					
4,4'-DDD				5.0E-04	5.0E-04
4,4'-DDE	***5.0E-03***	2.7E-02	***1.3E-04***	5.2E-04	***1.3E-04***
4,4'-DDT				3.6E-04	3.6E-04
Aldrin				***2.6E-04***	***2.6E-04***
alpha-BHC				***2.6E-04***	***2.6E-04***
alpha-Chlordane				***2.6E-04***	***2.6E-04***
beta-BHC				***2.6E-04***	***2.6E-04***
delta-BHC				***2.6E-04***	***2.6E-04***
Dieldrin				5.1E-04	5.1E-04
Endosulfan I				2.6E-04	2.6E-04
Endosulfan II				5.0E-04	5.0E-04
Endosulfan Sulfate				5.0E-04	5.0E-04
Endrin				***5.0E-04***	***5.0E-04***
Endrin Aldehyde				5.0E-04	5.0E-04
Endrin Ketone				***5.0E-04***	***5.0E-04***
gamma-BHC (Lindane)				2.2E-04	2.2E-04
gamma-Chlordane				***2.6E-04***	***2.6E-04***
Heptachlor	2.2E-03	1.6E-03	3.5E-06	2.3E-04	3.5E-06
Heptachlor Epoxide				2.6E-04	2.6E-04
Methoxychlor				2.6E-03	2.6E-03
Toxaphene				***2.6E-02***	***2.6E-02***
Herbicides					
2,4-D				4.5E-02	4.5E-02
2,4-DB				5.7E-02	5.7E-02
2,4,5-T				4.3E-02	4.3E-02
2,4,5-TP (Silvex)				***4.3E-02***	***4.3E-02***
Dalapon				***1.0E+01***	***1.0E+01***
Dicamba				***1.0E-01***	***1.0E-01***
Dichlorprop				5.1E-01	5.1E-01
Dinoseb				***5.0E-02***	***5.0E-02***
MCPA				***1.0E+01***	***1.0E+01***
MCPP				1.0E+01	1.0E+01
PCBs					
Total PCBs				2.8E-03	2.8E-03
Dioxins/Furans					
TEQ	3.5E-07	3.3E-02	1.1E-08	4.2E-07	1.1E-08
Metals					
Aluminum				2.4E+01	2.4E+01
Antimony	***1.0E+00***	6.0E-04	***6.0E-04***	1.0E-01	***6.0E-04***
Arsenic	***5.0E-01***	1.2E-03	***6.0E-04***	7.1E-02	***6.0E-04***
Barium	1.1E+01	9.0E-05	9.7E-04	1.6E+00	9.7E-04
Beryllium	***2.0E-01***	6.0E-04	***1.2E-04***	2.1E-02	***1.2E-04***
Cadmium	3.1E-01	7.2E-05	2.2E-05	3.6E-02	2.2E-05
Chromium	3.3E-01	3.3E-03	1.1E-03	6.6E-02	1.1E-03
Cobalt				6.6E-02	6.6E-02
Copper				5.7E-01	5.7E-01
Lead	9.3E-01	1.8E-04	1.7E-04	3.2E-01	1.7E-04
Manganese				2.0E+00	2.0E+00
Mercury	4.0E-01	4.7E-04	1.9E-04	4.0E-02	1.9E-04
Nickel	***2.0E+00***	3.6E-03	***7.2E-03***	2.5E-01	***7.2E-03***
Selenium	***5.0E-01***	1.4E-03	***6.8E-04***	5.2E-02	***6.8E-04***
Silver	***5.0E-01***	1.8E-03	***9.0E-04***	5.2E-02	***9.0E-04***
Thallium	***5.0E-01***	2.4E-02	***1.2E-02***	***5.2E-02***	***1.2E-02***
Vanadium				1.1E-01	1.1E-01
Zinc	3.7E+01	5.4E-05	2.0E-03	4.4E+00	2.0E-03

NOTES:
Bolded/Italicized values indicate a concentration/ADD based entirely on non-detected values.

Table III-B1
Estimated Concentrations Within the Vole Calculations
Site-Wide
Sauget, IL

Analyte	Plant Average Value (mg/kg)	BCF_{P-M}	Calculated Concentration (mg/kg)	Vole ADD (mg/kg-day)	Estimated Concentration Within the Vole (mg/kg)
SVOCs					
1,2,4-Trichlorobenzene				5.2E-02	5.2E-02
1,2-Dichlorobenzene				5.3E-02	5.3E-02
1,3-Dichlorobenzene				5.1E-02	5.1E-02
1,4-Dichlorobenzene				5.1E-02	5.1E-02
2,2'-Oxybis(1-Chloropropane)				***5.1E-02***	***5.1E-02***
2,4,5-Trichlorophenol				5.1E-02	5.1E-02
2,4,6-Trichlorophenol				5.1E-02	5.1E-02
2,4-Dichlorophenol				5.1E-02	5.1E-02
2,4-Dinitrophenol				***2.6E-01***	***2.6E-01***
2,4-Dinitrotoluene	***5.0E-01***	1.5E-06	***7.4E-07***	***5.1E-02***	***7.4E-07***
2,6-Dinitrotoluene	***5.0E-01***	1.2E-06	***5.7E-07***	***5.1E-02***	***5.7E-07***
2-Chloronaphthalene				***5.1E-02***	***5.1E-02***
2-Chlorophenol				***5.1E-02***	***5.1E-02***
2-Methylnaphthalene				5.1E-02	5.1E-02
2-Methylphenol (o-Cresol)				***5.1E-02***	***5.1E-02***
2-Nitroaniline				2.6E-01	2.6E-01
2-Nitrophenol				***5.1E-02***	***5.1E-02***
3,3'-Dichlorobenzidine				***1.0E-01***	***1.0E-01***
3/4-Methylphenol (m&p-Cresol)				***5.1E-02***	***5.1E-02***
3-Nitroaniline				***2.6E-01***	***2.6E-01***
4,6-Dinitro-2-methylphenol				***2.6E-01***	***2.6E-01***
4-Bromophenyl Phenyl Ether				***5.1E-02***	***5.1E-02***
4-Chloro-3-methylphenol				***5.1E-02***	***5.1E-02***
4-Chloroaniline				1.0E-01	1.0E-01
4-Chlorophenyl Phenyl Ether				***5.1E-02***	***5.1E-02***
4-Nitroaniline				2.6E-01	2.6E-01
4-Nitrophenol				***2.6E-01***	***2.6E-01***
Acenaphthene				5.1E-02	5.1E-02
Acenaphthylene				***5.1E-02***	***5.1E-02***
Anthracene				5.1E-02	5.1E-02
Benzo(a)anthracene	***5.0E-01***	7.2E-03	***3.6E-03***	5.1E-02	***3.6E-03***
Benzo(a)pyrene	***5.0E-01***	2.0E-02	***1.0E-02***	5.1E-02	***1.0E-02***
Benzo(b)fluoranthene	***5.0E-01***	2.4E-02	***1.2E-02***	5.1E-02	***1.2E-02***
Benzo(g,h,i)perylene				4.7E-02	4.7E-02
Benzo(k)fluoranthene	***5.0E-01***	2.4E-02	***1.2E-02***	5.1E-02	***1.2E-02***
bis(2-Chloroethoxy)methane				***5.1E-02***	***5.1E-02***
bis(2-Chloroethyl)ether				***5.1E-02***	***5.1E-02***
bis(2-Ethylhexyl)phthalate	4.8E-01	2.4E-03	1.2E-03	5.1E-02	1.2E-03
Butyl Benzyl Phthalate				6.3E-02	6.3E-02
Carbazole				5.1E-02	5.1E-02
Chrysene	***5.0E-01***	8.3E-03	***4.1E-03***	5.2E-02	***4.1E-03***
Dibenzo(a,h)anthracene	***5.0E-01***	5.3E-02	***2.6E-02***	5.1E-02	***2.6E-02***
Dibenzofuran				5.1E-02	5.1E-02
Diethyl Phthalate				5.1E-02	5.1E-02
Dimethyl Phthalate				***5.1E-02***	***5.1E-02***
Di-n-butylphthalate				4.1E-02	4.1E-02
Di-n-octylphthalate	***5.0E-01***	3.2E+01	***1.6E+01***	5.1E-02	***1.6E+01***
Fluoranthene				5.2E-02	5.2E-02
Fluorene				5.1E-02	5.1E-02
Hexachlorobenzene	***5.0E-01***	4.8E-03	***2.4E-03***	5.1E-02	***2.4E-03***
Hexachlorobutadiene	***5.0E-01***	8.1E-04	***4.0E-04***	***5.1E-02***	***4.0E-04***
Hexachlorocyclopentadiene	***5.0E-01***	1.2E-03	***6.0E-04***	***5.1E-02***	***6.0E-04***
Hexachloroethane				***5.1E-02***	***5.1E-02***
Indeno(1,2,3-cd)pyrene	***5.0E-01***	1.2E-01	***6.1E-02***	5.1E-02	***6.1E-02***
Isophorone				5.1E-02	5.1E-02
Naphthalene				5.1E-02	5.1E-02
Nitrobenzene	***5.0E-01***	1.0E-06	***5.1E-07***	***5.1E-02***	***5.1E-07***
N-Nitroso-di-n-propylamine				***5.1E-02***	***5.1E-02***
N-Nitrosodiphenylamine				***5.1E-02***	***5.1E-02***
Pentachlorophenol	***3.1E-02***	1.8E-03	***5.7E-05***	5.3E-02	***5.7E-05***
Phenanthrene				5.2E-02	5.2E-02
Phenol				5.0E-02	5.0E-02
Pyrene				5.3E-02	5.3E-02

Table III-B1
Estimated Concentrations Within the Vole Calculations
Site-Wide
Sauget, IL

Analyte	Plant Average Value (mg/kg)	BCF_{P-M}	Calculated Concentration (mg/kg)	Vole ADD (mg/kg-day)	Estimated Concentration Within the Vole (mg/kg)
Pesticides					
4,4'-DDD				6.7E-04	6.7E-04
4,4'-DDE	5.0E-03	2.7E-02	1.4E-04	9.0E-04	1.4E-04
4,4'-DDT				2.5E-03	2.5E-03
Aldrin				3.3E-04	3.3E-04
alpha-BHC				3.5E-04	3.5E-04
alpha-Chlordane				3.5E-04	3.5E-04
beta-BHC				2.4E-03	2.4E-03
delta-BHC				3.2E-04	3.2E-04
Dieldrin				7.1E-04	7.1E-04
Endosulfan I				***3.5E-04***	***3.5E-04***
Endosulfan II				9.1E-04	9.1E-04
Endosulfan Sulfate				6.8E-04	6.8E-04
Endrin				1.3E-03	1.3E-03
Endrin Aldehyde				7.8E-04	7.8E-04
Endrin Ketone				6.8E-04	6.8E-04
gamma-BHC (Lindane)				8.6E-04	8.6E-04
gamma-Chlordane				5.8E-04	5.8E-04
Heptachlor	2.6E-03	1.6E-03	4.0E-06	4.0E-04	4.0E-06
Heptachlor Epoxide				3.6E-04	3.6E-04
Methoxychlor				4.0E-03	4.0E-03
Toxaphene				***3.5E-02***	***3.5E-02***
Herbicides					
2,4-D				5.7E-03	5.7E-03
2,4-DB				1.3E-02	1.3E-02
2,4,5-T				5.2E-03	5.2E-03
2,4,5-TP (Silvex)				2.6E-03	2.6E-03
Dalapon				***4.0E-01***	***4.0E-01***
Dicamba				4.4E-03	4.4E-03
Dichlorprop				2.7E-02	2.7E-02
Dinoseb				5.1E-02	5.1E-02
MCPA				6.7E-01	6.7E-01
MCPP				6.3E-01	6.3E-01
PCBs					
Total PCBs				1.5E-01	1.5E-01
Dioxins/Furans					
TEQ	5.7E-07	3.3E-02	1.9E-08	6.5E-06	1.9E-08
Metals					
Aluminum				2.6E+01	2.6E+01
Antimony	9.3E-01	6.0E-04	5.6E-04	1.0E-01	5.6E-04
Arsenic	4.7E-01	1.2E-03	5.7E-04	7.3E-02	5.7E-04
Barium	9.0E+00	9.0E-05	8.1E-04	1.8E+00	8.1E-04
Beryllium	***1.9E-01***	6.0E-04	***1.1E-04***	2.1E-02	***1.1E-04***
Cadmium	1.9E-01	7.2E-05	1.4E-05	4.5E-01	1.4E-05
Chromium	3.6E-01	3.3E-03	1.2E-03	1.5E-01	1.2E-03
Cobalt				7.3E-02	7.3E-02
Copper				9.4E-01	9.4E-01
Lead	1.8E+00	1.8E-04	3.2E-04	1.1E+00	3.2E-04
Manganese				2.5E+00	2.5E+00
Mercury	7.0E-01	4.7E-04	3.3E-04	1.0E-01	3.3E-04
Nickel	2.0E+00	3.6E-03	7.2E-03	3.1E-01	7.2E-03
Selenium	9.4E-01	1.4E-03	1.3E-03	9.8E-02	1.3E-03
Silver	***4.8E-01***	1.8E-03	***8.6E-04***	5.2E-02	***8.6E-04***
Thallium	***4.8E-01***	2.4E-02	***1.1E-02***	5.1E-02	***1.1E-02***
Vanadium				1.3E-01	1.3E-01
Zinc	2.8E+01	5.4E-05	1.5E-03	5.3E+00	1.5E-03

NOTES:
Bolded/Italicized values indicate a concentration/ADD based entirely on non-detected values.

Table III-B2
Calculations for Risk Assessment Modeling
Off-Site Areas - Soil
Sauget, IL

Analyte	Units	Off-Site Areas						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
1,1,2,2-Tetrachloroethane	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
1,1,2-Trichloroethane	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
1,1-Dichloroethane	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
1,1-Dichloroethylene	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
1,2-Dichloroethane	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
1,2-Dichloroethene (total)	ug/kg	4	0	5.5	9.0	Soil-OS-4	7.0	NA
1,2-Dichloropropane	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
2-Butanone (MEK)	ug/kg	4	0	14	23	Soil-OS-4	17	NA
2-Hexanone	ug/kg	4	0	14	23	Soil-OS-4	17	NA
4-Methyl-2-pentanone (MIBK)	ug/kg	4	0	14	23	Soil-OS-4	17	NA
Acetone	ug/kg	4	0	28	46	Soil-OS-4	35	NA
Benzene	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Bromodichloromethane	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Bromoform	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Bromomethane	ug/kg	4	0	5.5	9.0	Soil-OS-4	7.0	NA
Carbon Disulfide	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Carbon Tetrachloride	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Chlorobenzene	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Chloroethane	ug/kg	4	0	5.5	9.0	Soil-OS-4	7.0	NA
Chloroform	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Chloromethane	ug/kg	4	1	0.45	9.0	Soil-OS-4	5.7	NA
cis-1,3-Dichloropropene	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Dibromochloromethane	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Ethylbenzene	ug/kg	4	2	0.45	4.6	Soil-OS-4	2.1	NA
Methylene Chloride	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Styrene (Monomer)	ug/kg	4	2	0.76	4.6	Soil-OS-4	2.4	NA
Tetrachloroethene	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Toluene	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
trans-1,3-Dichloropropene	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Trichloroethylene	ug/kg	4	0	2.8	4.6	Soil-OS-4	3.5	NA
Vinyl chloride	ug/kg	4	0	5.5	9.0	Soil-OS-4	7.0	NA
Xylenes, Total	ug/kg	4	2	0.5	9.0	Soil-OS-4	4.2	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
1,2-Dichlorobenzene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
1,3-Dichlorobenzene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
1,4-Dichlorobenzene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	4	0	185	200	Soil-OS-2	191	NA
2,4,5-Trichlorophenol	ug/kg	4	0	185	200	Soil-OS-2	191	NA
2,4,6-Trichlorophenol	ug/kg	4	0	185	200	Soil-OS-2	191	NA
2,4-Dichlorophenol	ug/kg	4	0	185	200	Soil-OS-2	191	NA
2,4-Dimethylphenol	ug/kg	4	0	185	200	Soil-OS-2	191	NA
2,4-Dinitrophenol	ug/kg	4	0	950	1050	Soil-OS-2	988	NA
2,4-Dinitrotoluene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
2,6-Dinitrotoluene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
2-Chloronaphthalene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
2-Chlorophenol	ug/kg	4	0	185	200	Soil-OS-2	191	NA
2-Methylnaphthalene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
2-Methylphenol (o-Cresol)	ug/kg	4	0	185	200	Soil-OS-2	191	NA
2-Nitroaniline	ug/kg	4	0	950	1050	Soil-OS-2	988	NA
2-Nitrophenol	ug/kg	4	0	185	200	Soil-OS-2	191	NA
3,3'-Dichlorobenzidine	ug/kg	4	0	370	400	Soil-OS-2	383	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	4	0	185	200	Soil-OS-2	191	NA
3-Nitroaniline	ug/kg	4	0	950	1050	Soil-OS-2	988	NA
4,6-Dinitro-2-methylphenol	ug/kg	4	0	950	1050	Soil-OS-2	988	NA
4-Bromophenyl Phenyl Ether	ug/kg	4	0	185	200	Soil-OS-2	191	NA
4-Chloro-3-methylphenol	ug/kg	4	0	185	200	Soil-OS-2	191	NA
4-Chloroaniline	ug/kg	4	0	370	400	Soil-OS-2	383	NA
4-Chlorophenyl Phenyl Ether	ug/kg	4	0	185	200	Soil-OS-2	191	NA
4-Nitroaniline	ug/kg	4	0	950	1050	Soil-OS-2	988	NA
4-Nitrophenol	ug/kg	4	0	950	1050	Soil-OS-2	988	NA
Acenaphthene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Acenaphthylene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Anthracene	ug/kg	4	0	185	200	Soil-OS-2	191	NA

Table III-B2
Calculations for Risk Assessment Modeling
Off-Site Areas - Soil
Sauget, IL

Analyte	Units	Off-Site Areas						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/kg	4	3	22	190	Soil-OS-4	70	NA
Benzo(a)pyrene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Benzo(b)fluoranthene	ug/kg	4	1	40	190	Soil-OS-2 Dup/Soil-OS-4	151	NA
Benzo(g,h,i)perylene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Benzo(k)fluoranthene	ug/kg	4	2	18	190	Soil-OS-4	73	NA
bis(2-Chloroethoxy)methane	ug/kg	4	0	185	200	Soil-OS-2	191	NA
bis(2-Chloroethyl)ether	ug/kg	4	0	185	200	Soil-OS-2	191	NA
bis(2-Ethylhexyl)phthalate	ug/kg	4	1	185	300	Soil-OS-2 Dup	219	NA
Butyl Benzyl Phthalate	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Carbazole	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Chrysene	ug/kg	4	3	33	190	Soil-OS-4	77	NA
Dibenzo(a,h)anthracene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Dibenzofuran	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Diethyl Phthalate	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Dimethyl Phthalate	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Di-n-butylphthalate	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Di-n-octylphthalate	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Fluoranthene	ug/kg	4	2	47	190	Soil-OS-2 Dup/Soil-OS-4	121	NA
Fluorene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Hexachlorobenzene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Hexachlorobutadiene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Hexachlorocyclopentadiene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Hexachloroethane	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Indeno(1,2,3-cd)pyrene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Isophorone	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Naphthalene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Nitrobenzene	ug/kg	4	0	185	200	Soil-OS-2	191	NA
N-Nitroso-di-n-propylamine	ug/kg	4	0	185	200	Soil-OS-2	191	NA
N-Nitrosodiphenylamine	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Pentachlorophenol	ug/kg	4	3	1.7	10	Soil-OS-4	4.9	NA
Phenanthrene	ug/kg	4	3	31	190	Soil-OS-4	77	NA
Phenol	ug/kg	4	0	185	200	Soil-OS-2	191	NA
Pyrene	ug/kg	4	2	56	190	Soil-OS-2 Dup/Soil-OS-4	123	NA
Pesticides								
4,4'-DDD	ug/kg	4	2	1.9	6.6	Soil-OS-2	3.2	NA
4,4'-DDE	ug/kg	4	3	1.9	16	Soil-OS-2	7.6	NA
4,4'-DDT	ug/kg	4	3	1.9	46	Soil-OS-2	22	NA
Aldrin	ug/kg	4	0	1.0	1.1	Soil-OS-2	1.0	NA
alpha-BHC	ug/kg	4	0	1.0	1.1	Soil-OS-2	1.0	NA
alpha-Chlordane	ug/kg	4	0	1.0	1.1	Soil-OS-2	1.0	NA
beta-BHC	ug/kg	4	0	1.0	1.1	Soil-OS-2	1.0	NA
delta-BHC	ug/kg	4	0	1.0	1.1	Soil-OS-2	1.0	NA
Dieldrin	ug/kg	4	3	1.9	9.6	Soil-OS-2	4.6	NA
Endosulfan I	ug/kg	4	2	0.19	2.1	Soil-OS-3	1.1	NA
Endosulfan II	ug/kg	4	1	0.58	2.0	Soil-OS-2	1.6	NA
Endosulfan Sulfate	ug/kg	4	2	0.71	1.9	Soil-OS-2 Dup/Soil-OS-4	1.4	NA
Endrin	ug/kg	4	0	1.9	2.0	Soil-OS-2	1.9	NA
Endrin Aldehyde	ug/kg	4	1	1.9	3.0	Soil-OS-3	2.2	NA
Endrin Ketone	ug/kg	4	0	1.9	2.0	Soil-OS-2	1.9	NA
gamma-BHC (Lindane)	ug/kg	4	0	1.0	1.1	Soil-OS-2	1.0	NA
gamma-Chlordane	ug/kg	4	0	1.0	1.1	Soil-OS-2	1.0	NA
Heptachlor	ug/kg	4	0	1.0	1.1	Soil-OS-2	1.0	NA
Heptachlor Epoxide	ug/kg	4	3	0.77	2.3	Soil-OS-2	1.3	NA
Methoxychlor	ug/kg	4	1	2.8	11	Soil-OS-2	8.2	NA
Toxaphene	ug/kg	4	0	95	105	Soil-OS-2	99	NA
Herbicides								
2,4-D	ug/kg	4	1	4.7	5.8	Soil-OS-3	5.1	NA
2,4-DB	ug/kg	4	0	4.7	5.0	Soil-OS-2	4.8	NA
2,4,5-T	ug/kg	4	0	4.7	5.0	Soil-OS-2	4.8	NA
2,4,5-TP (Silvex)	ug/kg	4	0	4.7	5.0	Soil-OS-2	4.8	NA
Dalapon	ug/kg	4	0	1100	1200	Soil-OS-2	1150	NA
Dicamba	ug/kg	4	0	11	12	Soil-OS-2	12	NA
Dichlorprop	ug/kg	4	2	55	160	Soil-OS-2 Dup	84	NA
Dinoseb	ug/kg	4	0	185	200	Soil-OS-2	191	NA
MCPA	ug/kg	4	0	1100	1200	Soil-OS-2	1150	NA
MCPP	ug/kg	4	2	1100	6600	Soil-OS-2	2763	NA

Table III-B2
Calculations for Risk Assessment Modeling
Off-Site Areas - Soil
Sauget, IL

Analyte	Units	Off-Site Areas						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/kg	4	3	10	173	Soil-OS-2	109	NA
Dioxins/Furans								
TEQ	ug/kg	4	2	0.046	0.23	Soil-OS-4	0.13	NA
Metals								
Aluminum	mg/kg	4	4	5100	8200	Soil-OS-2 Dup	6675	NA
Antimony	mg/kg	4	3	0.93	1.9	Soil-OS-2	1.3	NA
Arsenic	mg/kg	4	4	5.4	9.3	Soil-OS-2 Dup	7.4	NA
Barium	mg/kg	4	4	170	200	Soil-OS-2 Dup	183	NA
Beryllium	mg/kg	4	4	0.40	0.60	Soil-OS-2 Dup	0.50	NA
Cadmium	mg/kg	4	4	0.34	4.5	Soil-OS-2	2.0	NA
Calcium	mg/kg	4	4	3100	11000	Soil-OS-4	5150	NA
Chromium	mg/kg	4	4	9.3	13	Soil-OS-2/Soil-OS-2 Dup	12	NA
Cobalt	mg/kg	4	4	3.3	6.6	Soil-OS-2	5.4	NA
Copper	mg/kg	4	4	12	150	Soil-OS-2	59	NA
Iron	mg/kg	4	4	11000	15000	Soil-OS-2 Dup	13000	NA
Lead	mg/kg	4	4	31	130	Soil-OS-2	79	NA
Magnesium	mg/kg	4	4	1700	5500	Soil-OS-4	3100	NA
Manganese	mg/kg	4	4	86	410	Soil-OS-2	284	NA
Mercury	mg/kg	4	4	0.057	0.11	Soil-OS-2	0.085	NA
Nickel	mg/kg	4	4	12	27	Soil-OS-2	18	NA
Potassium	mg/kg	4	4	1300	2300	Soil-OS-2/Soil-OS-2 Dup	1950	NA
Selenium	mg/kg	4	1	0.50	0.62	Soil-OS-2	0.56	NA
Silver	mg/kg	4	1	0.50	0.67	Soil-OS-2	0.57	NA
Sodium	mg/kg	4	0	38	47	Soil-OS-4	42	NA
Thallium	mg/kg	4	0	0.50	0.55	Soil-OS-2/Soil-OS-3, Soil-OS-4	0.54	NA
Vanadium	mg/kg	4	4	18	25	Soil-OS-2 Dup	22	NA
Zinc	mg/kg	4	4	55	440	Soil-OS-2	241	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B2
Calculations for Risk Assessment Modeling
Site P - Soil
Sauget, IL

Analyte	Units	Site P						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/kg	11	1	0.89	7.0	Soil-P-3	3.5	NA
1,1,2,2-Tetrachloroethane	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
1,1,2-Trichloroethane	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
1,1-Dichloroethane	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
1,1-Dichloroethylene	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
1,2-Dichloroethane	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
1,2-Dichloroethene (total)	ug/kg	11	0	3.6	14	Soil-P-3	7.2	NA
1,2-Dichloropropane	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
2-Butanone (MEK)	ug/kg	11	7	4.5	35	Soil-P-3	15	NA
2-Hexanone	ug/kg	11	1	5.9	35	Soil-P-3	16	NA
4-Methyl-2-pentanone (MIBK)	ug/kg	11	3	9.0	39	AT-P-4-SS	18	NA
Acetone	ug/kg	11	7	12	85	AT-P-5-SS	41	NA
Benzene	ug/kg	11	6	0.92	9.4	Soil-P-3	4.0	NA
Bromodichloromethane	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
Bromoform	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
Bromomethane	ug/kg	11	0	1.8	14	Soil-P-3	5.4	NA
Carbon Disulfide	ug/kg	11	3	1.4	5.0	AT-P-3-SS	2.8	NA
Carbon Tetrachloride	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
Chlorobenzene	ug/kg	12	4	1.8	540	SA-P-2-SS	49	NA
Chloroethane	ug/kg	11	0	1.8	14	Soil-P-3	5.4	NA
Chloroform	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
Chloromethane	ug/kg	11	0	1.8	14	Soil-P-3	5.4	NA
cis-1,3-Dichloropropene	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
Dibromochloromethane	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
Ethylbenzene	ug/kg	12	7	0.26	800	SA-P-2-SS	70	NA
Methylene Chloride	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
Styrene (Monomer)	ug/kg	11	1	0.34	7.0	Soil-P-3	3.3	NA
Tetrachloroethene	ug/kg	12	5	1.8	59000	SA-P-2-SS	4920	NA
Toluene	ug/kg	12	5	2.0	930	SA-P-2-SS	83	NA
trans-1,3-Dichloropropene	ug/kg	11	0	1.8	7.0	Soil-P-3	3.6	NA
Trichloroethylene	ug/kg	11	2	0.79	7.0	Soil-P-3	3.1	NA
Vinyl chloride	ug/kg	11	0	1.8	14	Soil-P-3	5.4	NA
Xylenes, Total	ug/kg	12	5	0.97	3700	SA-P-2-SS	318	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
1,2-Dichlorobenzene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
1,3-Dichlorobenzene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
1,4-Dichlorobenzene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
2,4,5-Trichlorophenol	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
2,4,6-Trichlorophenol	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
2,4-Dichlorophenol	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
2,4-Dimethylphenol	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
2,4-Dinitrophenol	ug/kg	10	0	950	22000	SA-P-2-SS	5230	NA
2,4-Dinitrotoluene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
2,6-Dinitrotoluene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
2-Chloronaphthalene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
2-Chlorophenol	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
2-Methylnaphthalene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
2-Methylphenol (o-Cresol)	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
2-Nitroaniline	ug/kg	12	0	950	22000	SA-P-2-SS	4554	NA
2-Nitrophenol	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
3,3'-Dichlorobenzidine	ug/kg	12	0	360	8500	SA-P-2-SS	1752	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
3-Nitroaniline	ug/kg	12	0	950	22000	SA-P-2-SS	4554	NA
4,6-Dinitro-2-methylphenol	ug/kg	12	0	950	22000	SA-P-2-SS	4554	NA
4-Bromophenyl Phenyl Ether	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
4-Chloro-3-methylphenol	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
4-Chloroaniline	ug/kg	12	1	360	21000	SA-P-2-SS	2793	NA
4-Chlorophenyl Phenyl Ether	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
4-Nitroaniline	ug/kg	12	0	950	22000	SA-P-2-SS	4554	NA
4-Nitrophenol	ug/kg	12	0	950	22000	SA-P-2-SS	4554	NA
Acenaphthene	ug/kg	12	1	75	4300	SA-P-2-SS	866	NA
Acenaphthylene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
Anthracene	ug/kg	12	2	73	4300	SA-P-2-SS	866	NA

Table III-B2
Calculations for Risk Assessment Modeling
Site P - Soil
Sauget, IL

Analyte	Units	Site P						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/kg	12	5	29	4300	SA-P-2-SS	899	NA
Benzo(a)pyrene	ug/kg	12	5	42	4300	SA-P-2-SS	906	NA
Benzo(b)fluoranthene	ug/kg	12	5	32	4300	SA-P-2-SS	919	NA
Benzo(g,h,i)perylene	ug/kg	12	5	72	4300	SA-P-2-SS	870	NA
Benzo(k)fluoranthene	ug/kg	12	5	30	4300	SA-P-2-SS	904	NA
bis(2-Chloroethoxy)methane	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
bis(2-Chloroethyl)ether	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
bis(2-Ethylhexyl)phthalate	ug/kg	12	7	35	4300	SA-P-2-SS	944	NA
Butyl Benzyl Phthalate	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
Carbazole	ug/kg	12	1	73	4300	SA-P-2-SS	866	NA
Chrysene	ug/kg	12	6	30	4300	SA-P-2-SS	908	NA
Dibenzo(a,h)anthracene	ug/kg	12	2	59	4300	SA-P-2-SS	857	NA
Dibenzofuran	ug/kg	12	1	29	4300	SA-P-2-SS	862	NA
Diethyl Phthalate	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
Dimethyl Phthalate	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
Di-n-butylphthalate	ug/kg	12	1	62	4300	SA-P-2-SS	863	NA
Di-n-octylphthalate	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
Fluoranthene	ug/kg	12	5	40	4300	SA-P-2-SS	1073	NA
Fluorene	ug/kg	12	1	65	4300	SA-P-2-SS	865	NA
Hexachlorobenzene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
Hexachlorobutadiene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
Hexachlorocyclopentadiene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
Hexachloroethane	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
Indeno(1,2,3-cd)pyrene	ug/kg	12	5	66	4300	SA-P-2-SS	853	NA
Isophorone	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
Naphthalene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
Nitrobenzene	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
N-Nitroso-di-n-propylamine	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
N-Nitrosodiphenylamine	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
Pentachlorophenol	ug/kg	12	10	4.3	790	SA-P-1-SS	142	NA
Phenanthrene	ug/kg	12	6	24	4300	SA-P-2-SS	937	NA
Phenol	ug/kg	12	1	180	4300	SA-P-2-SS	890	NA
Pyrene	ug/kg	12	8	39	4300	SA-P-2-SS	893	NA
Pesticides								
4,4'-DDD	ug/kg	4	0	2.1	41	Soil-P-1	25	NA
4,4'-DDE	ug/kg	4	1	3.0	41	Soil-P-1	25	NA
4,4'-DDT	ug/kg	4	4	8.1	1100	Soil-P-4	284	NA
Aldrin	ug/kg	4	0	1.1	21	Soil-P-1	13	NA
alpha-BHC	ug/kg	4	0	1.1	21	Soil-P-1	13	NA
alpha-Chlordane	ug/kg	4	2	1.5	21	Soil-P-1	13	NA
beta-BHC	ug/kg	4	0	1.1	21	Soil-P-1	13	NA
delta-BHC	ug/kg	4	0	1.1	21	Soil-P-1	13	NA
Dieldrin	ug/kg	4	2	2.0	41	Soil-P-1	21	NA
Endosulfan I	ug/kg	4	0	1.1	21	Soil-P-1	13	NA
Endosulfan II	ug/kg	4	0	2.1	41	Soil-P-1	25	NA
Endosulfan Sulfate	ug/kg	4	1	2.1	41	Soil-P-1	24	NA
Endrin	ug/kg	4	0	2.1	41	Soil-P-1	25	NA
Endrin Aldehyde	ug/kg	4	1	2.1	140	Soil-P-4	50	NA
Endrin Ketone	ug/kg	4	1	2.1	41	Soil-P-1	18	NA
gamma-BHC (Lindane)	ug/kg	4	0	1.1	21	Soil-P-1	13	NA
gamma-Chlordane	ug/kg	4	0	1.1	21	Soil-P-1	13	NA
Heptachlor	ug/kg	4	0	1.1	21	Soil-P-1	13	NA
Heptachlor Epoxide	ug/kg	4	1	1.1	21	Soil-P-1	12	NA
Methoxychlor	ug/kg	4	0	11	210	Soil-P-1	128	NA
Toxaphene	ug/kg	4	0	105	2100	Soil-P-1	1276	NA
Herbicides								
2,4-D	ug/kg	12	2	4.6	48	AT-P-4-SS	9.0	NA
2,4-DB	ug/kg	12	0	4.6	48	AT-P-4-SS	8.6	NA
2,4,5-T	ug/kg	12	1	1.4	48	AT-P-4-SS	8.3	NA
2,4,5-TP (Silvex)	ug/kg	12	0	4.6	48	AT-P-4-SS	8.6	NA
Dalapon	ug/kg	12	0	180	1900	AT-P-4-SS	671	NA
Dicamba	ug/kg	12	0	4.6	48	AT-P-4-SS	11	NA
Dichlorprop	ug/kg	12	3	1.2	600	AT-P-4-SS	92	NA
Dinoseb	ug/kg	12	0	180	4300	SA-P-2-SS	877	NA
MCPA	ug/kg	12	0	1100	11500	AT-P-4-SS	2063	NA
MCPP	ug/kg	12	3	560	11500	AT-P-4-SS	2376	NA

Table III-B2
Calculations for Risk Assessment Modeling
Site P - Soil
Sauget, IL

Analyte	Units	Site P						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/kg	4	3	11	7020	Soil-P-4	1764	NA
Dioxins/Furans								
TEQ	ug/kg	4	3	0.12	0.72	Soil-P-2	0.35	NA
Metals								
Aluminum	mg/kg	12	12	2900	8700	SA-P-1-SS-D	5592	NA
Antimony	mg/kg	12	9	0.56	1.6	Soil-P-1	1.0	NA
Arsenic	mg/kg	12	12	4.0	26	Soil-P-1	11	NA
Barium	mg/kg	12	12	77	720	AT-P-4-SS	171	NA
Beryllium	mg/kg	12	12	0.33	1.8	Soil-P-1	0.89	NA
Cadmium	mg/kg	12	12	0.62	25	AT-P-3-SS	4.4	NA
Calcium	mg/kg	12	12	3200	190000	AT-P-5-SS	59150	NA
Chromium	mg/kg	12	12	13	100	AT-P-4-SS	23	NA
Cobalt	mg/kg	12	12	3.5	13	Soil-P-1	7.3	NA
Copper	mg/kg	12	12	18	250	AT-P-3-SS	67	NA
Iron	mg/kg	12	12	6300	32000	AT-P-4-SS	12267	NA
Lead	mg/kg	12	12	15	2000	SA-P-1-SS	260	NA
Magnesium	mg/kg	12	12	460	12000	AT-P-5-SS	5603	NA
Manganese	mg/kg	12	12	31	2700	AT-P-4-SS	443	NA
Mercury	mg/kg	12	12	0.059	5.6	AT-P-5-SS	0.80	NA
Nickel	mg/kg	12	12	12	130	AT-P-4-SS	30	NA
Potassium	mg/kg	12	12	550	1800	SA-P-1-SS-D	1160	NA
Selenium	mg/kg	12	5	0.48	7.0	Soil-P-1	1.9	NA
Silver	mg/kg	12	9	0.13	1.4	AT-P-3-SS	0.49	NA
Sodium	mg/kg	12	11	24	550	AT-P-4-SS	278	NA
Thallium	mg/kg	12	1	0.48	1.7	AT-P-3-SS	1.2	NA
Vanadium	mg/kg	12	12	15	260	AT-P-4-SS	45	NA
Zinc	mg/kg	12	12	85	3100	AT-P-3-SS	728	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B2
Calculations for Risk Assessment Modeling
Site R - Soil
Sauget, IL

Analyte	Units	Site R						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
1,1,2,2-Tetrachloroethane	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
1,1,2-Trichloroethane	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
1,1-Dichloroethane	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
1,1-Dichloroethylene	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
1,2-Dichloroethane	ug/kg	4	2	1.5	3.6	Soil-R-1	2.6	NA
1,2-Dichloroethene (total)	ug/kg	4	1	0.94	7.0	Soil-R-1	4.7	NA
1,2-Dichloropropane	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
2-Butanone (MEK)	ug/kg	4	4	3.1	16	Soil-R-3	12	NA
2-Hexanone	ug/kg	4	0	14	18	Soil-R-1	15	NA
4-Methyl-2-pentanone (MIBK)	ug/kg	4	1	10	18	Soil-R-1	14	NA
Acetone	ug/kg	4	4	11	150	Soil-R-3	97	NA
Benzene	ug/kg	4	4	0.68	2.1	Soil-R-2	1.4	NA
Bromodichloromethane	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
Bromoform	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
Bromomethane	ug/kg	4	0	5.5	7.0	Soil-R-1	6.1	NA
Carbon Disulfide	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
Carbon Tetrachloride	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
Chlorobenzene	ug/kg	4	3	1.8	64	Soil-R-2	18	NA
Chloroethane	ug/kg	4	0	5.5	7.0	Soil-R-1	6.1	NA
Chloroform	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
Chloromethane	ug/kg	4	0	5.5	7.0	Soil-R-1	6.1	NA
cis-1,3-Dichloropropene	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
Dibromochloromethane	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
Ethylbenzene	ug/kg	4	4	0.24	1.9	Soil-R-2	0.71	NA
Methylene Chloride	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
Styrene (Monomer)	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
Tetrachloroethene	ug/kg	4	3	2.6	12	Soil-R-2	7.0	NA
Toluene	ug/kg	4	1	1.8	3.6	Soil-R-1	2.9	NA
trans-1,3-Dichloropropene	ug/kg	4	0	2.7	3.6	Soil-R-1	3.1	NA
Trichloroethylene	ug/kg	4	3	0.30	19	Soil-R-4	8.7	NA
Vinyl chloride	ug/kg	4	0	5.5	7.0	Soil-R-1	6.1	NA
Xylenes, Total	ug/kg	4	3	0.95	9.1	Soil-R-2	4.6	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	4	0	175	185	Soil-R-3	179	NA
1,2-Dichlorobenzene	ug/kg	4	0	175	185	Soil-R-3	179	NA
1,3-Dichlorobenzene	ug/kg	4	0	175	185	Soil-R-3	179	NA
1,4-Dichlorobenzene	ug/kg	4	0	175	185	Soil-R-3	179	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	4	0	175	185	Soil-R-3	179	NA
2,4,5-Trichlorophenol	ug/kg	4	0	175	185	Soil-R-3	179	NA
2,4,6-Trichlorophenol	ug/kg	4	0	175	185	Soil-R-3	179	NA
2,4-Dichlorophenol	ug/kg	4	0	175	185	Soil-R-3	179	NA
2,4-Dimethylphenol	ug/kg	4	0	175	185	Soil-R-3	179	NA
2,4-Dinitrophenol	ug/kg	4	0	900	950	Soil-R-3	913	NA
2,4-Dinitrotoluene	ug/kg	4	0	175	185	Soil-R-3	179	NA
2,6-Dinitrotoluene	ug/kg	4	0	175	185	Soil-R-3	179	NA
2-Chloronaphthalene	ug/kg	4	0	175	185	Soil-R-3	179	NA
2-Chlorophenol	ug/kg	4	0	175	185	Soil-R-3	179	NA
2-Methylnaphthalene	ug/kg	4	0	175	185	Soil-R-3	179	NA
2-Methylphenol (o-Cresol)	ug/kg	4	0	175	185	Soil-R-3	179	NA
2-Nitroaniline	ug/kg	4	0	900	950	Soil-R-3	913	NA
2-Nitrophenol	ug/kg	4	0	175	185	Soil-R-3	179	NA
3,3'-Dichlorobenzidine	ug/kg	4	0	350	370	Soil-R-3	359	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	4	0	175	185	Soil-R-3	179	NA
3-Nitroaniline	ug/kg	4	0	900	950	Soil-R-3	913	NA
4,6-Dinitro-2-methylphenol	ug/kg	4	0	900	950	Soil-R-3	913	NA
4-Bromophenyl Phenyl Ether	ug/kg	4	0	175	185	Soil-R-3	179	NA
4-Chloro-3-methylphenol	ug/kg	4	0	175	185	Soil-R-3	179	NA
4-Chloroaniline	ug/kg	4	0	350	370	Soil-R-3	359	NA
4-Chlorophenyl Phenyl Ether	ug/kg	4	0	175	185	Soil-R-3	179	NA
4-Nitroaniline	ug/kg	4	0	900	950	Soil-R-3	913	NA
4-Nitrophenol	ug/kg	4	0	900	950	Soil-R-3	913	NA
Acenaphthene	ug/kg	4	0	175	185	Soil-R-3	179	NA
Acenaphthylene	ug/kg	4	0	175	185	Soil-R-3	179	NA
Anthracene	ug/kg	4	0	175	185	Soil-R-3	179	NA

Table III-B2
Calculations for Risk Assessment Modeling
Site R - Soil
Sauget, IL

Analyte	Units	Site R						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/kg	4	2	30	185	Soil-R-3	106	NA
Benzo(a)pyrene	ug/kg	4	2	26	185	Soil-R-3	105	NA
Benzo(b)fluoranthene	ug/kg	4	2	30	185	Soil-R-3	106	NA
Benzo(g,h,i)perylene	ug/kg	4	2	25	185	Soil-R-3	108	NA
Benzo(k)fluoranthene	ug/kg	4	2	26	185	Soil-R-3	105	NA
bis(2-Chloroethoxy)methane	ug/kg	4	0	175	185	Soil-R-3	179	NA
bis(2-Chloroethyl)ether	ug/kg	4	0	175	185	Soil-R-3	179	NA
bis(2-Ethylhexyl)phthalate	ug/kg	4	1	78	185	Soil-R-3	155	NA
Butyl Benzyl Phthalate	ug/kg	4	0	175	185	Soil-R-3	179	NA
Carbazole	ug/kg	4	0	175	185	Soil-R-3	179	NA
Chrysene	ug/kg	4	3	20	175	Soil-R-2	70	NA
Dibenzo(a,h)anthracene	ug/kg	4	0	175	185	Soil-R-3	179	NA
Dibenzofuran	ug/kg	4	0	175	185	Soil-R-3	179	NA
Diethyl Phthalate	ug/kg	4	0	175	185	Soil-R-3	179	NA
Dimethyl Phthalate	ug/kg	4	0	175	185	Soil-R-3	179	NA
Di-n-butylphthalate	ug/kg	4	0	175	185	Soil-R-3	179	NA
Di-n-octylphthalate	ug/kg	4	0	175	185	Soil-R-3	179	NA
Fluoranthene	ug/kg	4	1	39	185	Soil-R-3	144	NA
Fluorene	ug/kg	4	0	175	185	Soil-R-3	179	NA
Hexachlorobenzene	ug/kg	4	0	175	185	Soil-R-3	179	NA
Hexachlorobutadiene	ug/kg	4	0	175	185	Soil-R-3	179	NA
Hexachlorocyclopentadiene	ug/kg	4	0	175	185	Soil-R-3	179	NA
Hexachloroethane	ug/kg	4	0	175	185	Soil-R-3	179	NA
Indeno(1,2,3-cd)pyrene	ug/kg	4	1	43	185	Soil-R-3	146	NA
Isophorone	ug/kg	4	0	175	185	Soil-R-3	179	NA
Naphthalene	ug/kg	4	0	175	185	Soil-R-3	179	NA
Nitrobenzene	ug/kg	4	0	175	185	Soil-R-3	179	NA
N-Nitroso-di-n-propylamine	ug/kg	4	0	175	185	Soil-R-3	179	NA
N-Nitrosodiphenylamine	ug/kg	4	0	175	185	Soil-R-3	179	NA
Pentachlorophenol	ug/kg	4	0	13	46	Soil-R-1	36	NA
Phenanthrene	ug/kg	4	2	21	185	Soil-R-3	103	NA
Phenol	ug/kg	4	0	175	185	Soil-R-3	179	NA
Pyrene	ug/kg	4	1	48	185	Soil-R-3	146	NA
Pesticides								
4,4'-DDD	ug/kg	4	0	1.8	3.6	Soil-R-1	2.2	NA
4,4'-DDE	ug/kg	4	0	1.8	3.6	Soil-R-1	2.2	NA
4,4'-DDT	ug/kg	4	1	1.8	2.7	Soil-R-1	2.0	NA
Aldrin	ug/kg	4	0	0.90	1.8	Soil-R-1	1.1	NA
alpha-BHC	ug/kg	4	0	0.90	1.8	Soil-R-1	1.1	NA
alpha-Chlordane	ug/kg	4	0	0.90	1.8	Soil-R-1	1.1	NA
beta-BHC	ug/kg	4	0	0.90	1.8	Soil-R-1	1.1	NA
delta-BHC	ug/kg	4	0	0.90	1.8	Soil-R-1	1.1	NA
Dieldrin	ug/kg	4	3	0.37	1.8	Soil-R-2	1.1	NA
Endosulfan I	ug/kg	4	0	0.90	1.8	Soil-R-1	1.1	NA
Endosulfan II	ug/kg	4	0	1.8	3.6	Soil-R-1	2.2	NA
Endosulfan Sulfate	ug/kg	4	0	1.8	3.6	Soil-R-1	2.2	NA
Endrin	ug/kg	4	0	1.8	3.6	Soil-R-1	2.2	NA
Endrin Aldehyde	ug/kg	4	0	1.8	3.6	Soil-R-1	2.2	NA
Endrin Ketone	ug/kg	4	0	1.8	3.6	Soil-R-1	2.2	NA
gamma-BHC (Lindane)	ug/kg	4	0	0.90	1.8	Soil-R-1	1.1	NA
gamma-Chlordane	ug/kg	4	1	0.23	1.8	Soil-R-1	1.0	NA
Heptachlor	ug/kg	4	0	0.90	1.8	Soil-R-1	1.1	NA
Heptachlor Epoxide	ug/kg	4	0	0.90	1.8	Soil-R-1	1.1	NA
Methoxychlor	ug/kg	4	0	9.0	18	Soil-R-1	11	NA
Toxaphene	ug/kg	4	0	90	180	Soil-R-1	114	NA
Herbicides								
2,4-D	ug/kg	4	1	9.0	55	Soil-R-2	26	NA
2,4-DB	ug/kg	4	3	23	60	Soil-R-4	34	NA
2,4,5-T	ug/kg	4	0	4.5	23	Soil-R-1	17	NA
2,4,5-TP (Silvex)	ug/kg	4	1	9.3	23	Soil-R-1	18	NA
Dalapon	ug/kg	4	0	1100	5500	Soil-R-1	4150	NA
Dicamba	ug/kg	4	0	11	55	Soil-R-1	42	NA
Dichlorprop	ug/kg	4	4	44	100	Soil-R-1	78	NA
Dinoseb	ug/kg	4	0	175	185	Soil-R-3	179	NA
MCPA	ug/kg	4	0	1100	5500	Soil-R-1	4150	NA
MCPP	ug/kg	4	4	5200	51000	Soil-R-3	37050	NA

Table III-B2
Calculations for Risk Assessment Modeling
Site R - Soil
Sauget, IL

Analyte	Units	Site R						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/kg	4	1	6.6	9.5	Soil-R-3	8.5	NA
Dioxins/Furans								
TEQ	ug/kg	4	0	0.036	0.25	Soil-R-2	0.14	NA
Metals								
Aluminum	mg/kg	4	4	7600	10000	Soil-R-3	8750	NA
Antimony	mg/kg	4	1	0.44	1.1	Soil-R-3	0.87	NA
Arsenic	mg/kg	4	4	5.5	7.2	Soil-R-1	6.4	NA
Barium	mg/kg	4	4	110	150	Soil-R-1	125	NA
Beryllium	mg/kg	4	4	0.48	0.68	Soil-R-1	0.56	NA
Cadmium	mg/kg	4	2	0.25	0.76	Soil-R-2	0.44	NA
Calcium	mg/kg	4	4	4400	6400	Soil-R-2	5600	NA
Chromium	mg/kg	4	4	13	17	Soil-R-3	15	NA
Cobalt	mg/kg	4	4	6.8	15	Soil-R-1	9.3	NA
Copper	mg/kg	4	4	15	25	Soil-R-2	20	NA
Iron	mg/kg	4	4	15000	18000	Soil-R-1	16750	NA
Lead	mg/kg	4	4	8.6	33	Soil-R-1	18	NA
Magnesium	mg/kg	4	4	3400	4800	Soil-R-3	4325	NA
Manganese	mg/kg	4	4	550	1200	Soil-R-1	750	NA
Mercury	mg/kg	4	4	0.037	0.076	Soil-R-2	0.059	NA
Nickel	mg/kg	4	4	17	21	Soil-R-3	19	NA
Potassium	mg/kg	4	4	790	1000	Soil-R-3	873	NA
Selenium	mg/kg	4	0	0.49	0.55	Soil-R-3	0.51	NA
Silver	mg/kg	4	0	0.49	0.55	Soil-R-3	0.51	NA
Sodium	mg/kg	4	4	87	120	Soil-R-3	102	NA
Thallium	mg/kg	4	0	0.49	0.55	Soil-R-3	0.51	NA
Vanadium	mg/kg	4	4	27	34	Soil-R-1	30	NA
Zinc	mg/kg	4	4	43	120	Soil-R-2	75	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B2
Calculations for Rsk Assessment Modeling
Site O - Soil
Sauget, IL

Analyte	Units	Site O						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/kg	12	1	1.9	255	Soil-O-5-SS	42	NA
1,1,2,2-Tetrachloroethane	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
1,1,2-Trichloroethane	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
1,1-Dichloroethane	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
1,1-Dichloroethylene	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
1,2-Dichloroethane	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
1,2-Dichloroethene (total)	ug/kg	12	0	3.7	500	Soil-O-5-SS	82	NA
1,2-Dichloropropane	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
2-Butanone (MEK)	ug/kg	12	6	6.9	1300	Soil-O-5-SS	206	NA
2-Hexanone	ug/kg	12	0	9.5	1300	Soil-O-5-SS	207	NA
4-Methyl-2-pentanone (MIBK)	ug/kg	12	0	9.5	1300	Soil-O-5-SS	207	NA
Acetone	ug/kg	11	10	8.3	1200	Soil-O-5-SS	156	NA
Benzene	ug/kg	12	7	1.1	1100	Soil-O-5-SS	144	NA
Bromodichloromethane	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
Bromoform	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
Bromomethane	ug/kg	12	0	1.9	425	Soil-O-1	60	NA
Carbon Disulfide	ug/kg	12	5	1.7	255	Soil-O-5-SS	39	NA
Carbon Tetrachloride	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
Chlorobenzene	ug/kg	12	6	1.9	14000	Soil-O-5-SS	1656	NA
Chloroethane	ug/kg	12	0	1.9	425	Soil-O-1	60	NA
Chloroform	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
Chloromethane	ug/kg	12	0	1.9	425	Soil-O-1	60	NA
cis-1,3-Dichloropropene	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
Dibromochloromethane	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
Ethylbenzene	ug/kg	12	8	0.38	4400	Soil-O-1	477	NA
Methylene Chloride	ug/kg	12	1	1.9	300	Soil-O-5-SS	45	NA
Styrene (Monomer)	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
Tetrachloroethene	ug/kg	12	5	1.0	290	Soil-O-1	41	NA
Toluene	ug/kg	12	9	1.9	870	Soil-O-1	136	NA
trans-1,3-Dichloropropene	ug/kg	12	0	1.9	255	Soil-O-5-SS	41	NA
Trichloroethylene	ug/kg	12	1	0.58	255	Soil-O-5-SS	41	NA
Vinyl chloride	ug/kg	12	0	1.9	425	Soil-O-1	60	NA
Xylenes, Total	ug/kg	12	8	1.3	80000	Soil-O-1	7190	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	12	4	30	220	Soil-O-5-SS	175	NA
1,2-Dichlorobenzene	ug/kg	12	7	34	1100	Soil-O-5-SS	275	NA
1,3-Dichlorobenzene	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
1,4-Dichlorobenzene	ug/kg	12	4	46	630	Soil-O-5-SS	227	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
2,4,5-Trichlorophenol	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
2,4,6-Trichlorophenol	ug/kg	12	3	160	1300	Soil-O-5-SS	304	NA
2,4-Dichlorophenol	ug/kg	12	4	35	940	Soil-O-5-SS	263	NA
2,4-Dimethylphenol	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
2,4-Dinitrophenol	ug/kg	12	0	900	5000	Soil-O-5-SS	1346	NA
2,4-Dinitrotoluene	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
2,6-Dinitrotoluene	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
2-Chloronaphthalene	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
2-Chlorophenol	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
2-Methylnaphthalene	ug/kg	12	3	38	1000	Soil-O-5-SS	224	NA
2-Methylphenol (o-Cresol)	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
2-Nitroaniline	ug/kg	12	4	53	1050	Various	809	NA
2-Nitrophenol	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
3,3'-Dichlorobenzidine	ug/kg	12	0	350	1950	Soil-O-5-SS	524	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
3-Nitroaniline	ug/kg	12	0	900	5000	Soil-O-5-SS	1346	NA
4,6-Dinitro-2-methylphenol	ug/kg	12	0	900	5000	Soil-O-5-SS	1346	NA
4-Bromophenyl Phenyl Ether	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
4-Chloro-3-methylphenol	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
4-Chloroaniline	ug/kg	12	1	77	1950	Soil-O-5-SS	494	NA
4-Chlorophenyl Phenyl Ether	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
4-Nitroaniline	ug/kg	12	3	900	1200	SA-O-1-SS-D	1013	NA
4-Nitrophenol	ug/kg	12	0	900	5000	Soil-O-5-SS	1346	NA
Acenaphthene	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Acenaphthylene	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Anthracene	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA

Table III-B2
Calculations for Rsk Assessment Modeling
Site O - Soil
Sauget, IL

Analyte	Units	Site O						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/kg	12	4	37	1000	Soil-O-5-SS	225	NA
Benzo(a)pyrene	ug/kg	12	4	37	1000	Soil-O-5-SS	237	NA
Benzo(b)fluoranthene	ug/kg	12	6	40	1000	Soil-O-5-SS	249	NA
Benzo(g,h,i)perylene	ug/kg	12	4	42	1200	Soil-O-3	427	NA
Benzo(k)fluoranthene	ug/kg	12	3	100	1000	Soil-O-5-SS	271	NA
bis(2-Chloroethoxy)methane	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
bis(2-Chloroethyl)ether	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
bis(2-Ethylhexyl)phthalate	ug/kg	12	6	23	1000	Soil-O-5-SS	318	NA
Butyl Benzyl Phthalate	ug/kg	12	7	35	79000	Soil-O-5-SS	10824	NA
Carbazole	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Chrysene	ug/kg	12	6	59	1000	Soil-O-5-SS	283	NA
Dibenzo(a,h)anthracene	ug/kg	12	3	78	1000	Soil-O-5-SS	244	NA
Dibenzofuran	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Diethyl Phthalate	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Dimethyl Phthalate	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Di-n-butylphthalate	ug/kg	12	2	37	1000	Soil-O-5-SS	238	NA
Di-n-octylphthalate	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Fluoranthene	ug/kg	12	4	36	1000	Soil-O-5-SS	216	NA
Fluorene	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Hexachlorobenzene	ug/kg	12	4	110	510	Soil-O-5-SS	244	NA
Hexachlorobutadiene	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Hexachlorocyclopentadiene	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Hexachloroethane	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Indeno(1,2,3-cd)pyrene	ug/kg	12	3	32	1000	Soil-O-5-SS	251	NA
Isophorone	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Naphthalene	ug/kg	12	1	36	1000	Soil-O-5-SS	250	NA
Nitrobenzene	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
N-Nitroso-di-n-propylamine	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
N-Nitrosodiphenylamine	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Pentachlorophenol	ug/kg	12	12	23	480000	Soil-O-5-SS	43556	NA
Phenanthrene	ug/kg	12	6	32	1000	Soil-O-5-SS	209	NA
Phenol	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
Pyrene	ug/kg	12	8	33	1000	Soil-O-5-SS	255	NA
Pesticides								
4,4'-DDD	ug/kg	3	1	1.8	86	Soil-O-3	30	NA
4,4'-DDE	ug/kg	3	0	1.8	20	Soil-O-3	7.7	NA
4,4'-DDT	ug/kg	3	2	0.81	230	Soil-O-3	78	NA
Aldrin	ug/kg	3	0	0.90	10	Soil-O-3	4.0	NA
alpha-BHC	ug/kg	3	0	0.90	10	Soil-O-3	4.0	NA
alpha-Chlordane	ug/kg	3	1	0.90	9.4	Soil-O-3	3.8	NA
beta-BHC	ug/kg	3	0	0.90	10	Soil-O-3	4.0	NA
delta-BHC	ug/kg	3	0	0.90	10	Soil-O-3	4.0	NA
Dieldrin	ug/kg	3	2	1.4	180	Soil-O-3	61	NA
Endosulfan I	ug/kg	3	0	0.90	10	Soil-O-3	4.0	NA
Endosulfan II	ug/kg	3	1	1.8	11	Soil-O-3	4.9	NA
Endosulfan Sulfate	ug/kg	3	1	1.8	170	Soil-O-3	58	NA
Endrin	ug/kg	3	0	1.8	20	Soil-O-3	7.7	NA
Endrin Aldehyde	ug/kg	3	1	1.8	20	Soil-O-3	8.2	NA
Endrin Ketone	ug/kg	3	1	1.8	22	Soil-O-3	8.6	NA
gamma-BHC (Lindane)	ug/kg	3	1	0.90	32	Soil-O-3	11	NA
gamma-Chlordane	ug/kg	3	2	0.33	180	Soil-O-3	60	NA
Heptachlor	ug/kg	3	1	0.90	16	Soil-O-3	6.0	NA
Heptachlor Epoxide	ug/kg	3	0	0.90	10	Soil-O-3	4.0	NA
Methoxychlor	ug/kg	3	1	0.88	100	Soil-O-3	37	NA
Toxaphene	ug/kg	3	0	90	1000	Soil-O-3	395	NA
Herbicides								
2,4-D	ug/kg	12	3	4.9	10000	Soil-O-5-SS	1064	NA
2,4-DB	ug/kg	12	2	4.9	10000	Soil-O-5-SS	1059	NA
2,4,5-T	ug/kg	12	3	4.7	10000	Soil-O-5-SS	1059	NA
2,4,5-TP (Silvex)	ug/kg	12	0	4.7	10000	Soil-O-5-SS	1057	NA
Dalapon	ug/kg	12	0	190	390000	Soil-O-5-SS	41999	NA
Dicamba	ug/kg	12	1	2.4	10000	Soil-O-5-SS	1060	NA
Dichlorprop	ug/kg	12	3	10	120000	Soil-O-5-SS	12732	NA
Dinoseb	ug/kg	12	0	175	1000	Soil-O-5-SS	264	NA
MCPA	ug/kg	12	0	1150	2350000	Soil-O-5-SS	250083	NA
MCPP	ug/kg	12	5	1200	2350000	Soil-O-5-SS	255929	NA

Table III-B2
Calculations for Rsk Assessment Modeling
Site O - Soil
Sauget, IL

Analyte	Units	Site O						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/kg	3	3	0.78	709200	Soil-O-3	239988	NA
Dioxins/Furans								
TEQ	ug/kg	3	3	0.058	51	Soil-O-1	19	NA
Metals								
Aluminum	mg/kg	12	12	4300	11000	Soil-O-4-SS/Soil-O-4-SS-D	7642	NA
Antimony	mg/kg	12	8	0.56	1.6	Soil-O-5-SS	0.98	NA
Arsenic	mg/kg	12	12	4.5	11	Various	7.5	NA
Barium	mg/kg	12	12	82	540	SA-O-1-SS-D	222	NA
Beryllium	mg/kg	12	12	0.33	0.75	Soil-O-4-SS	0.50	NA
Cadmium	mg/kg	12	10	0.28	32	Soil-O-5-SS	7.6	NA
Calcium	mg/kg	12	12	4700	26000	Soil-O-2/SA-O-2-SS	12783	NA
Chromium	mg/kg	12	12	10	42	Soil-O-5-SS	17	NA
Cobalt	mg/kg	12	12	3.6	7.4	Soil-O-4-SS/Soil-O-4-SS-D	6.2	NA
Copper	mg/kg	12	12	14	680	Soil-O-5-SS	165	NA
Iron	mg/kg	12	12	8900	17000	Soil-O-4-SS/Soil-O-4-SS-D	13408	NA
Lead	mg/kg	12	12	8.0	170	SA-O-1-SS-D	73	NA
Magnesium	mg/kg	12	12	1900	8900	Soil-O-3-SS	4842	NA
Manganese	mg/kg	12	12	100	560	Soil-O-4-SS	370	NA
Mercury	mg/kg	12	12	0.029	180	SA-O-1-SS/SA-O-1-SS-D	36	NA
Nickel	mg/kg	12	12	13	140	Soil-O-5-SS	30	NA
Potassium	mg/kg	12	12	580	2300	Soil-O-4-SS/Soil-O-4-SS-D	1149	NA
Selenium	mg/kg	12	3	0.55	10	SA-O-1-SS-D	2.2	NA
Silver	mg/kg	12	6	0.55	4.2	SA-O-1-SS-D/Soil-O-5-SS	1.6	NA
Sodium	mg/kg	12	12	85	300	Soil-O-5-SS	166	NA
Thallium	mg/kg	12	0	0.55	1.5	Various	1.2	NA
Vanadium	mg/kg	12	12	15	29	Various	24	NA
Zinc	mg/kg	12	12	39	2400	Soil-O-5-SS	549	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B2
Calculations for Risk Assessment Modeling
Site S - Soil
Sauget, IL

Analyte	Units	Site S						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/kg	2	1	2.7	6.6	SA-S-1-SS	4.7	NA
1,1,2,2-Tetrachloroethane	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
1,1,2-Trichloroethane	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
1,1-Dichloroethane	ug/kg	2	1	2.7	5.6	SA-S-1-SS	4.2	NA
1,1-Dichloroethylene	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
1,2-Dichloroethane	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
1,2-Dichloroethene (total)	ug/kg	2	0	4.5	5.5	Soil-S-1	5.0	NA
1,2-Dichloropropane	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
2-Butanone (MEK)	ug/kg	2	1	14	26	SA-S-1-SS	20	NA
2-Hexanone	ug/kg	2	0	11	14	Soil-S-1	12	NA
4-Methyl-2-pentanone (MIBK)	ug/kg	2	0	11	14	Soil-S-1	12	NA
Acetone	ug/kg	2	2	14	170	SA-S-1-SS	92	NA
Benzene	ug/kg	2	1	1.5	2.7	Soil-S-1	2.1	NA
Bromodichloromethane	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
Bromoform	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
Bromomethane	ug/kg	2	0	2.3	5.5	Soil-S-1	3.9	NA
Carbon Disulfide	ug/kg	2	1	2.7	4.8	SA-S-1-SS	3.8	NA
Carbon Tetrachloride	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
Chlorobenzene	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
Chloroethane	ug/kg	2	0	2.3	5.5	Soil-S-1	3.9	NA
Chloroform	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
Chloromethane	ug/kg	2	0	2.3	5.5	Soil-S-1	3.9	NA
cis-1,3-Dichloropropene	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
Dibromochloromethane	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
Ethylbenzene	ug/kg	2	1	1.1	2.7	Soil-S-1	1.9	NA
Methylene Chloride	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
Styrene (Monomer)	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
Tetrachloroethene	ug/kg	2	1	2.7	3.0	SA-S-1-SS	2.9	NA
Toluene	ug/kg	2	1	2.7	6.2	SA-S-1-SS	4.5	NA
trans-1,3-Dichloropropene	ug/kg	2	0	2.3	2.7	Soil-S-1	2.5	NA
Trichloroethylene	ug/kg	2	1	1.9	2.7	Soil-S-1	2.3	NA
Vinyl chloride	ug/kg	2	0	2.3	5.5	Soil-S-1	3.9	NA
Xylenes, Total	ug/kg	2	1	4.4	5.5	Soil-S-1	5.0	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	2	1	230	36000	Soil-S-1	18115	NA
1,2-Dichlorobenzene	ug/kg	2	1	230	37000	Soil-S-1	18615	NA
1,3-Dichlorobenzene	ug/kg	2	1	230	1000	Soil-S-1	615	NA
1,4-Dichlorobenzene	ug/kg	2	1	230	7500	Soil-S-1	3865	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
2,4,5-Trichlorophenol	ug/kg	2	1	230	1100	Soil-S-1	665	NA
2,4,6-Trichlorophenol	ug/kg	2	1	230	8200	Soil-S-1	4215	NA
2,4-Dichlorophenol	ug/kg	2	1	230	2300	Soil-S-1	1265	NA
2,4-Dimethylphenol	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
2,4-Dinitrophenol	ug/kg	2	0	1200	37000	Soil-S-1	19100	NA
2,4-Dinitrotoluene	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
2,6-Dinitrotoluene	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
2-Chloronaphthalene	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
2-Chlorophenol	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
2-Methylnaphthalene	ug/kg	2	1	230	11000	Soil-S-1	5615	NA
2-Methylphenol (o-Cresol)	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
2-Nitroaniline	ug/kg	2	1	1200	4600	Soil-S-1	2900	NA
2-Nitrophenol	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
3,3'-Dichlorobenzidine	ug/kg	2	0	460	14500	Soil-S-1	7480	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
3-Nitroaniline	ug/kg	2	0	1200	37000	Soil-S-1	19100	NA
4,6-Dinitro-2-methylphenol	ug/kg	2	0	1200	37000	Soil-S-1	19100	NA
4-Bromophenyl Phenyl Ether	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
4-Chloro-3-methylphenol	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
4-Chloroaniline	ug/kg	2	0	460	14500	Soil-S-1	7480	NA
4-Chlorophenyl Phenyl Ether	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
4-Nitroaniline	ug/kg	2	1	1200	57000	Soil-S-1	29100	NA
4-Nitrophenol	ug/kg	2	0	1200	37000	Soil-S-1	19100	NA
Acenaphthene	ug/kg	2	1	230	1200	Soil-S-1	715	NA
Acenaphthylene	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Anthracene	ug/kg	2	0	230	7000	Soil-S-1	3615	NA

Table III-B2
Calculations for Risk Assessment Modeling
Site S - Soil
Sauget, IL

Analyte	Units	Site S						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/kg	2	1	230	8000	Soil-S-1	4115	NA
Benzo(a)pyrene	ug/kg	2	1	230	5400	Soil-S-1	2815	NA
Benzo(b)fluoranthene	ug/kg	2	1	230	6600	Soil-S-1	3415	NA
Benzo(g,h,i)perylene	ug/kg	2	1	230	4200	Soil-S-1	2215	NA
Benzo(k)fluoranthene	ug/kg	2	1	230	6400	Soil-S-1	3315	NA
bis(2-Chloroethoxy)methane	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
bis(2-Chloroethyl)ether	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
bis(2-Ethylhexyl)phthalate	ug/kg	2	2	540	3900	Soil-S-1	2220	NA
Butyl Benzyl Phthalate	ug/kg	2	1	230	120000	Soil-S-1	60115	NA
Carbazole	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Chrysene	ug/kg	2	1	230	20000	Soil-S-1	10115	NA
Dibenzo(a,h)anthracene	ug/kg	2	1	230	1800	Soil-S-1	1015	NA
Dibenzofuran	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Diethyl Phthalate	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Dimethyl Phthalate	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Di-n-butylphthalate	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Di-n-octylphthalate	ug/kg	2	1	230	1300	Soil-S-1	765	NA
Fluoranthene	ug/kg	2	1	230	4200	Soil-S-1	2215	NA
Fluorene	ug/kg	2	1	230	1200	Soil-S-1	715	NA
Hexachlorobenzene	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Hexachlorobutadiene	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Hexachlorocyclopentadiene	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Hexachloroethane	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Indeno(1,2,3-cd)pyrene	ug/kg	2	1	230	1300	Soil-S-1	765	NA
Isophorone	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Naphthalene	ug/kg	2	1	230	2100	Soil-S-1	1165	NA
Nitrobenzene	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
N-Nitroso-di-n-propylamine	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
N-Nitrosodiphenylamine	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Pentachlorophenol	ug/kg	2	2	18	440000	Soil-S-1	220009	NA
Phenanthrene	ug/kg	2	1	230	9200	Soil-S-1	4715	NA
Phenol	ug/kg	2	0	230	7000	Soil-S-1	3615	NA
Pyrene	ug/kg	2	1	230	28000	Soil-S-1	14115	NA
Pesticides								
4,4'-DDD	ug/kg	1	1	1700	1700	Soil-S-1	1700	NA
4,4'-DDE	ug/kg	1	1	3300	3300	Soil-S-1	3300	NA
4,4'-DDT	ug/kg	1	1	16000	16000	Soil-S-1	16000	NA
Aldrin	ug/kg	1	0	900	900	Soil-S-1	900	NA
alpha-BHC	ug/kg	1	0	900	900	Soil-S-1	900	NA
alpha-Chlordane	ug/kg	1	0	900	900	Soil-S-1	900	NA
beta-BHC	ug/kg	1	1	26000	26000	Soil-S-1	26000	NA
delta-BHC	ug/kg	1	1	740	740	Soil-S-1	740	NA
Dieldrin	ug/kg	1	0	1800	1800	Soil-S-1	1800	NA
Endosulfan I	ug/kg	1	0	900	900	Soil-S-1	900	NA
Endosulfan II	ug/kg	1	1	5400	5400	Soil-S-1	5400	NA
Endosulfan Sulfate	ug/kg	1	0	1800	1800	Soil-S-1	1800	NA
Endrin	ug/kg	1	1	10000	10000	Soil-S-1	10000	NA
Endrin Aldehyde	ug/kg	1	0	1800	1800	Soil-S-1	1800	NA
Endrin Ketone	ug/kg	1	0	1800	1800	Soil-S-1	1800	NA
gamma-BHC (Lindane)	ug/kg	1	1	7500	7500	Soil-S-1	7500	NA
gamma-Chlordane	ug/kg	1	1	2700	2700	Soil-S-1	2700	NA
Heptachlor	ug/kg	1	1	1500	1500	Soil-S-1	1500	NA
Heptachlor Epoxide	ug/kg	1	0	900	900	Soil-S-1	900	NA
Methoxychlor	ug/kg	1	0	9000	9000	Soil-S-1	9000	NA
Toxaphene	ug/kg	1	0	90000	90000	Soil-S-1	90000	NA
Herbicides								
2,4-D	ug/kg	2	1	6.0	3300	Soil-S-1	1653	NA
2,4-DB	ug/kg	2	0	6.0	90	Soil-S-1	48	NA
2,4,5-T	ug/kg	2	0	6.0	18000	Soil-S-1	9003	NA
2,4,5-TP (Silvex)	ug/kg	2	1	6.0	250	Soil-S-1	128	NA
Dalapon	ug/kg	2	0	230	21500	Soil-S-1	10865	NA
Dicamba	ug/kg	2	1	2.2	215	Soil-S-1	109	NA
Dichlorprop	ug/kg	2	0	70	1100	Soil-S-1	585	NA
Dinoseb	ug/kg	2	1	230	1700	Soil-S-1	965	NA
MCPA	ug/kg	2	0	1400	21500	Soil-S-1	11450	NA
MCPP	ug/kg	2	1	8400	21500	Soil-S-1	14950	NA

Table III-B2
Calculations for Risk Assessment Modeling
Site S - Soil
Sauget, IL

Analyte	Units	Site S						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/kg	1	1	1008500	1008500	Soil-S-1	1008500	NA
Dioxins/Furans								
TEQ	ug/kg	1	1	0.012	0.012	Soil-S-1	0.012	NA
Metals								
Aluminum	mg/kg	2	2	7300	9400	SA-S-1-SS	8350	NA
Antimony	mg/kg	2	1	0.58	1.2	SA-S-1-SS	0.89	NA
Arsenic	mg/kg	2	2	5.8	6.6	SA-S-1-SS	6.2	NA
Barium	mg/kg	2	2	110	120	Soil-S-1	115	NA
Beryllium	mg/kg	2	2	0.46	0.48	SA-S-1-SS	0.47	NA
Cadmium	mg/kg	2	2	0.76	0.85	Soil-S-1	0.81	NA
Calcium	mg/kg	2	2	4900	7900	SA-S-1-SS	6400	NA
Chromium	mg/kg	2	2	17	23	Soil-S-1	20	NA
Cobalt	mg/kg	2	2	7.3	9.4	Soil-S-1	8.4	NA
Copper	mg/kg	2	2	20	23	Soil-S-1	22	NA
Iron	mg/kg	2	2	13000	15000	SA-S-1-SS	14000	NA
Lead	mg/kg	2	2	26	63	Soil-S-1	45	NA
Magnesium	mg/kg	2	2	2600	4800	SA-S-1-SS	3700	NA
Manganese	mg/kg	2	2	540	670	Soil-S-1	605	NA
Mercury	mg/kg	2	2	0.063	0.074	Soil-S-1	0.069	NA
Nickel	mg/kg	2	2	16	20	Soil-S-1	18	NA
Potassium	mg/kg	2	2	870	1100	SA-S-1-SS	985	NA
Selenium	mg/kg	2	0	0.50	1.5	SA-S-1-SS	1.0	NA
Silver	mg/kg	2	0	0.50	0.60	SA-S-1-SS	0.55	NA
Sodium	mg/kg	2	2	79	120	SA-S-1-SS	100	NA
Thallium	mg/kg	2	0	0.50	1.5	SA-S-1-SS	1.0	NA
Vanadium	mg/kg	2	2	24	27	SA-S-1-SS	26	NA
Zinc	mg/kg	2	2	77	110	Soil-S-1	94	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B2
Calculations for Risk Assessment Modeling
Site Q - Soil
Sauget, IL

Analyte	Units	Site Q						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
1,1,2,2-Tetrachloroethane	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
1,1,2-Trichloroethane	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
1,1-Dichloroethane	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
1,1-Dichloroethylene	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
1,2-Dichloroethane	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
1,2-Dichloroethene (total)	ug/kg	26	2	4.0	16	AT-Q-33-SS	6.9	7.9
1,2-Dichloropropane	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
2-Butanone (MEK)	ug/kg	26	15	2.3	31	SOIL-Q-11	15	18
2-Hexanone	ug/kg	26	6	5.7	190	SOIL-Q-17	32	50
4-Methyl-2-pentanone (MIBK)	ug/kg	26	8	3.0	29	SA-Q-10-SS-D	14	16
Acetone	ug/kg	26	17	13	260	SOIL-Q-20	82	108
Benzene	ug/kg	26	14	1.1	18	SA-Q-10-SS-D	4.0	5.4
Bromodichloromethane	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
Bromoform	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
Bromomethane	ug/kg	26	0	2.0	13	SOIL-Q-11	5.3	6.4
Carbon Disulfide	ug/kg	26	13	0.66	7.6	SA-Q-12-SS	3.7	4.4
Carbon Tetrachloride	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
Chlorobenzene	ug/kg	26	8	0.36	45	SOIL-Q-11	4.8	8.1
Chloroethane	ug/kg	26	0	2.0	13	SOIL-Q-11	5.3	6.4
Chloroform	ug/kg	26	1	1.8	5.0	SOIL-Q-11 DUP	3.0	3.3
Chloromethane	ug/kg	26	0	2.0	13	SOIL-Q-11	5.3	6.4
cis-1,3-Dichloropropene	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
Dibromochloromethane	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
Ethylbenzene	ug/kg	26	16	0.23	21	SOIL-Q-11 DUP	2.7	4.2
Methylene Chloride	ug/kg	26	2	2.0	6.0	SOIL-Q-11	3.2	3.5
Styrene (Monomer)	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
Tetrachloroethene	ug/kg	26	11	0.47	1700	AT-Q-33-SS	96	228
Toluene	ug/kg	26	19	1.0	400	SA-Q-10-SS-D	24	54
trans-1,3-Dichloropropene	ug/kg	26	0	2.0	6.0	SOIL-Q-11	3.2	3.5
Trichloroethylene	ug/kg	26	10	1.2	87	SA-Q-10-SS-D	8.6	15
Vinyl chloride	ug/kg	26	0	2.0	13	SOIL-Q-11	5.3	6.4
Xylenes, Total	ug/kg	26	21	0.56	250	SOIL-Q-11 DUP	19	38
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
1,2-Dichlorobenzene	ug/kg	26	2	31	1950	SOIL-Q-10 DUP	258	392
1,3-Dichlorobenzene	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
1,4-Dichlorobenzene	ug/kg	26	3	82	1950	SOIL-Q-10 DUP	278	411
2,2'-Oxybis(1-Chloropropane)	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
2,4,5-Trichlorophenol	ug/kg	24	0	190	1950	SOIL-Q-10 DUP	278	421
2,4,6-Trichlorophenol	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
2,4-Dichlorophenol	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
2,4-Dimethylphenol	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
2,4-Dinitrophenol	ug/kg	26	0	950	10000	SOIL-Q-10 DUP	1413	2087
2,4-Dinitrotoluene	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
2,6-Dinitrotoluene	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
2-Chloronaphthalene	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
2-Chlorophenol	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
2-Methylnaphthalene	ug/kg	26	3	48	1950	SOIL-Q-10 DUP	254	388
2-Methylphenol (o-Cresol)	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
2-Nitroaniline	ug/kg	26	0	950	10000	SOIL-Q-10 DUP	1413	2087
2-Nitrophenol	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
3,3'-Dichlorobenzidine	ug/kg	26	0	380	3900	SOIL-Q-10 DUP	548	811
3/4-Methylphenol (m&p-Cresol)	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
3-Nitroaniline	ug/kg	26	0	950	10000	SOIL-Q-10 DUP	1413	2087
4,6-Dinitro-2-methylphenol	ug/kg	26	0	950	10000	SOIL-Q-10 DUP	1413	2087
4-Bromophenyl Phenyl Ether	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
4-Chloro-3-methylphenol	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
4-Chloroaniline	ug/kg	26	1	330	3900	SOIL-Q-10 DUP	545	809
4-Chlorophenyl Phenyl Ether	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
4-Nitroaniline	ug/kg	26	0	950	10000	SOIL-Q-10 DUP	1413	2087
4-Nitrophenol	ug/kg	26	0	950	10000	SOIL-Q-10 DUP	1413	2087
Acenaphthene	ug/kg	26	7	37	290	AT-Q-35-SS	182	206
Acenaphthylene	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
Anthracene	ug/kg	26	10	38	1400	SOIL-Q-10 DUP	294	409

Table III-B2
Calculations for Risk Assessment Modeling
Site Q - Soil
Sauget, IL

Analyte	Units	Site Q						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/kg	26	22	30	4500	SOIL-Q-10 DUP	590	990
Benzo(a)pyrene	ug/kg	26	22	23	5300	SOIL-Q-10 DUP	594	1030
Benzo(b)fluoranthene	ug/kg	26	20	33	4800	SOIL-Q-10 DUP	644	1089
Benzo(g,h,i)perylene	ug/kg	26	19	37	3800	SOIL-Q-10 DUP	364	651
Benzo(k)fluoranthene	ug/kg	26	22	32	4400	SOIL-Q-10 DUP	469	825
bis(2-Chloroethoxy)methane	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
bis(2-Chloroethyl)ether	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
bis(2-Ethylhexyl)phthalate	ug/kg	26	19	25	13000	SOIL-Q-11	1181	2217
Butyl Benzyl Phthalate	ug/kg	26	7	100	1950	SOIL-Q-10 DUP	307	449
Carbazole	ug/kg	26	7	63	670	SOIL-Q-10 DUP	215	263
Chrysene	ug/kg	26	24	23	5100	SOIL-Q-10 DUP	633	1081
Dibenzo(a,h)anthracene	ug/kg	26	5	61	1950	SOIL-Q-10 DUP	267	402
Dibenzofuran	ug/kg	26	5	24	1950	SOIL-Q-10 DUP	248	384
Diethyl Phthalate	ug/kg	26	1	78	1950	SOIL-Q-10 DUP	268	400
Dimethyl Phthalate	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
Di-n-butylphthalate	ug/kg	26	7	51	1950	SOIL-Q-10 DUP	239	375
Di-n-octylphthalate	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
Fluoranthene	ug/kg	26	24	34	8000	SOIL-Q-10 DUP	1118	1883
Fluorene	ug/kg	26	6	34	1950	SOIL-Q-10 DUP	254	389
Hexachlorobenzene	ug/kg	26	1	55	1950	SOIL-Q-10 DUP	268	401
Hexachlorobutadiene	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
Hexachlorocyclopentadiene	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
Hexachloroethane	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
Indeno(1,2,3-cd)pyrene	ug/kg	26	14	37	1950	SOIL-Q-10 DUP	285	445
Isophorone	ug/kg	26	3	180	1950	SOIL-Q-10 DUP	295	430
Naphthalene	ug/kg	26	5	28	1950	SOIL-Q-10 DUP	269	403
Nitrobenzene	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
N-Nitroso-di-n-propylamine	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
N-Nitrosodiphenylamine	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
Pentachlorophenol	ug/kg	26	20	1.1	3600	SOIL-Q-11 DUP	240	555
Phenanthrene	ug/kg	26	19	26	6300	SOIL-Q-10 DUP	766	1326
Phenol	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
Pyrene	ug/kg	26	21	34	8600	SOIL-Q-10 DUP	1131	1906
Pesticides								
4,4'-DDD	ug/kg	24	5	1.2	48	SOIL-Q-11 DUP	13	19
4,4'-DDE	ug/kg	23	11	0.71	570	SOIL-Q-11	62	127
4,4'-DDT	ug/kg	24	21	1.9	2600	SOIL-Q-9	376	633
Aldrin	ug/kg	24	2	0.70	25	SOIL-Q-11 DUP	6.6	9.6
alpha-BHC	ug/kg	24	2	0.95	200	SOIL-Q-11 DUP	20	40
alpha-Chlordane	ug/kg	24	11	0.15	60	SOIL-Q-11 DUP	9.7	16
beta-BHC	ug/kg	24	1	0.95	25	SOIL-Q-11 DUP	6.6	9.6
delta-BHC	ug/kg	24	0	0.95	25	SOIL-Q-11 DUP	6.6	9.6
Dieldrin	ug/kg	24	16	0.41	400	SOIL-Q-11	62	108
Endosulfan I	ug/kg	24	0	0.95	25	SOIL-Q-11 DUP	6.6	9.6
Endosulfan II	ug/kg	24	2	1.0	48	SOIL-Q-11 DUP	13	18
Endosulfan Sulfate	ug/kg	24	4	1.9	43	SOIL-Q-11 DUP	10	15
Endrin	ug/kg	24	2	1.9	170	SOIL-Q-9	19	33
Endrin Aldehyde	ug/kg	24	5	0.92	48	SOIL-Q-11 DUP	12	18
Endrin Ketone	ug/kg	24	6	0.52	110	SOIL-Q-11/SOIL-Q-11 DUP	18	30
gamma-BHC (Lindane)	ug/kg	24	1	0.95	25	SOIL-Q-11 DUP	6.4	9.4
gamma-Chlordane	ug/kg	24	9	0.53	410	SOIL-Q-11	45	90
Heptachlor	ug/kg	24	0	0.95	25	SOIL-Q-11 DUP	6.6	9.6
Heptachlor Epoxide	ug/kg	24	12	0.23	76	SOIL-Q-9	12	19
Methoxychlor	ug/kg	24	1	9.5	245	SOIL-Q-11 DUP	79	108
Toxaphene	ug/kg	24	0	95	2450	SOIL-Q-11 DUP	655	956
Herbicides								
2,4-D	ug/kg	26	12	4.7	120	SOIL-Q-11	12	20
2,4-DB	ug/kg	26	1	4.8	120	SOIL-Q-11	10	19
2,4,5-T	ug/kg	26	4	1.3	120	SOIL-Q-11	9.7	18
2,4,5-TP (Silvex)	ug/kg	26	1	2.3	120	SOIL-Q-11	9.5	18
Dalapon	ug/kg	26	0	190	28500	SOIL-Q-11	1827	3928
Dicamba	ug/kg	26	1	2.0	285	SOIL-Q-11	20	40
Dichlorprop	ug/kg	26	7	1.5	1400	SOIL-Q-11	99	202
Dinoseb	ug/kg	26	0	190	1950	SOIL-Q-10 DUP	274	405
MCPA	ug/kg	26	7	600	28500	SOIL-Q-11	2377	4438
MCPP	ug/kg	26	13	750	28500	SOIL-Q-11	3602	5840

Table III-B2
Calculations for Risk Assessment Modeling
Site Q - Soil
Sauget, IL

Analyte	Units	Site Q						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/kg	24	19	1.3	13815	SOIL-Q-11 DUP	2428	4081
Dioxins/Furans								
TEQ	ug/kg	24	24	0.11	8.0	SOIL-Q-11	0.92	1.7
Metals								
Aluminum	mg/kg	26	26	3800	14000	SOIL-Q-13	9277	10238
Antimony	mg/kg	26	26	0.52	47	SOIL-Q-9	4.9	8.9
Arsenic	mg/kg	26	26	3.3	33	SOIL-Q-9	9	12
Barium	mg/kg	26	26	86	1500	SOIL-Q-11 DUP	482	643
Beryllium	mg/kg	26	26	0.28	0.99	SOIL-Q-13	0.65	0.72
Cadmium	mg/kg	26	26	0.41	8000	AT-Q-33-SS	314	917
Calcium	mg/kg	26	26	6400	73000	SOIL-Q-11 DUP	17792	24731
Chromium	mg/kg	26	26	8.0	660	SOIL-Q-9	64	114
Cobalt	mg/kg	26	26	5.0	20	SOIL-Q-9	9.4	10.9
Copper	mg/kg	26	26	7.0	2600	SOIL-Q-11	308	512
Iron	mg/kg	26	26	9200	90000	SOIL-Q-9	26942	34998
Lead	mg/kg	26	26	15	3100	SOIL-Q-9	499	815
Magnesium	mg/kg	26	26	2700	5800	AT-Q-35-SS	4173	4487
Manganese	mg/kg	26	26	290	2100	SOIL-Q-9	548	683
Mercury	mg/kg	25	25	0.021	140	AT-Q-35-SS	6.3	17
Nickel	mg/kg	26	26	11	500	SOIL-Q-9	50	86
Potassium	mg/kg	26	26	710	2300	SOIL-Q-13	1311	1435
Selenium	mg/kg	26	4	0.50	3.0	SOIL-Q-11	1.2	1.4
Silver	mg/kg	26	18	0.11	17	SOIL-Q-11	2.4	3.9
Sodium	mg/kg	26	13	39	870	AT-Q-33-SS	205	285
Thallium	mg/kg	26	5	0.50	3.3	AT-Q-33-SS	1.3	1.5
Vanadium	mg/kg	26	26	13	36	SOIL-Q-13	25	27
Zinc	mg/kg	26	26	100	12000	AT-Q-33-SS	1295	2219

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B2
Calculations for Risk Assessment Modeling
Site-Wide - Soil
Sauget, IL

Analyte	Units	Site-Wide						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/kg	55	3	0.89	255	Soil-O-5-SS	12	23
1,1,2,2-Tetrachloroethane	ug/kg	55	0	1.8	255	Soil-O-5-SS	11	23
1,1,2-Trichloroethane	ug/kg	55	0	1.8	255	Soil-O-5-SS	11	23
1,1-Dichloroethane	ug/kg	55	1	1.8	255	Soil-O-5-SS	12	23
1,1-Dichloroethylene	ug/kg	55	0	1.8	255	Soil-O-5-SS	11	23
1,2-Dichloroethane	ug/kg	55	2	1.5	255	Soil-O-5-SS	11	23
1,2-Dichloroethene (total)	ug/kg	55	3	0.94	500	Soil-O-5-SS	23	46
1,2-Dichloropropane	ug/kg	55	0	1.8	255	Soil-O-5-SS	11	23
2-Butanone (MEK)	ug/kg	55	33	2.3	1300	Soil-O-5-SS	57	115
2-Hexanone	ug/kg	55	7	5.7	1300	Soil-O-5-SS	65	124
4-Methyl-2-pentanone (MIBK)	ug/kg	55	12	3.0	1300	Soil-O-5-SS	57	115
Acetone	ug/kg	54	40	8.3	1200	Soil-O-5-SS	91	134
Benzene	ug/kg	55	32	0.68	1100	Soil-O-5-SS	34	78
Bromodichloromethane	ug/kg	55	0	1.8	255	Soil-O-5-SS	11	23
Bromoform	ug/kg	55	0	1.8	255	Soil-O-5-SS	11	23
Bromomethane	ug/kg	55	0	1.8	425	Soil-O-1	17	34
Carbon Disulfide	ug/kg	55	22	0.66	255	Soil-O-5-SS	11	22
Carbon Tetrachloride	ug/kg	55	0	1.8	255	Soil-O-5-SS	11	23
Chlorobenzene	ug/kg	56	21	0.36	14000	Soil-O-5-SS	369	895
Chloroethane	ug/kg	55	0	1.8	425	Soil-O-1	17	34
Chloroform	ug/kg	55	1	1.8	255	Soil-O-5-SS	11	23
Chloromethane	ug/kg	55	0	1.8	425	Soil-O-1	17	34
cis-1,3-Dichloropropene	ug/kg	55	0	1.8	255	Soil-O-5-SS	11	23
Dibromochloromethane	ug/kg	55	0	1.8	255	Soil-O-5-SS	11	23
Ethylbenzene	ug/kg	56	36	0.23	4400	Soil-O-1	119	280
Methylene Chloride	ug/kg	55	3	1.8	300	Soil-O-5-SS	12	25
Styrene (Monomer)	ug/kg	55	1	0.34	255	Soil-O-5-SS	11	23
Tetrachloroethene	ug/kg	56	25	0.47	59000	SA-P-2-SS	1108	3172
Toluene	ug/kg	56	35	1.0	930	SA-P-2-SS	59	110
trans-1,3-Dichloropropene	ug/kg	55	0	1.8	255	Soil-O-5-SS	11	23
Trichloroethylene	ug/kg	55	17	0.30	255	Soil-O-5-SS	14	26
Vinyl chloride	ug/kg	55	0	1.8	425	Soil-O-1	17	34
Xylenes, Total	ug/kg	56	38	0.56	80000	Soil-O-1	1618	4423
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	56	5	30	36000	Soil-S-1	1012	2271
1,2-Dichlorobenzene	ug/kg	56	10	31	37000	Soil-S-1	1044	2337
1,3-Dichlorobenzene	ug/kg	56	1	175	4300	SA-P-2-SS	406	582
1,4-Dichlorobenzene	ug/kg	56	8	46	7500	Soil-S-1	516	820
2,2'-Oxybis(1-Chloropropane)	ug/kg	56	0	175	7000	Soil-S-1	513	803
2,4,5-Trichlorophenol	ug/kg	54	1	175	4300	SA-P-2-SS	415	597
2,4,6-Trichlorophenol	ug/kg	56	4	160	8200	Soil-S-1	543	868
2,4-Dichlorophenol	ug/kg	56	5	35	4300	SA-P-2-SS	429	616
2,4-Dimethylphenol	ug/kg	56	0	175	7000	Soil-S-1	513	803
2,4-Dinitrophenol	ug/kg	54	0	900	37000	Soil-S-1	2723	4295
2,4-Dinitrotoluene	ug/kg	56	0	175	7000	Soil-S-1	513	803
2,6-Dinitrotoluene	ug/kg	56	0	175	7000	Soil-S-1	513	803
2-Chloronaphthalene	ug/kg	56	0	175	7000	Soil-S-1	513	803
2-Chlorophenol	ug/kg	56	0	175	7000	Soil-S-1	513	803
2-Methylnaphthalene	ug/kg	56	7	38	11000	Soil-S-1	567	979
2-Methylphenol (o-Cresol)	ug/kg	56	0	175	7000	Soil-S-1	513	803
2-Nitroaniline	ug/kg	56	5	53	22000	SA-P-2-SS	1974	2876
2-Nitrophenol	ug/kg	56	0	175	7000	Soil-S-1	513	803
3,3'-Dichlorobenzidine	ug/kg	56	0	350	14500	Soil-S-1	1035	1626
3/4-Methylphenol (m&p-Cresol)	ug/kg	56	0	175	7000	Soil-S-1	513	803
3-Nitroaniline	ug/kg	56	0	900	37000	Soil-S-1	2668	4185
4,6-Dinitro-2-methylphenol	ug/kg	56	0	900	37000	Soil-S-1	2668	4185
4-Bromophenyl Phenyl Ether	ug/kg	56	0	175	7000	Soil-S-1	513	803
4-Chloro-3-methylphenol	ug/kg	56	0	175	7000	Soil-S-1	513	803
4-Chloroaniline	ug/kg	56	3	77	21000	SA-P-2-SS	1250	2131
4-Chlorophenyl Phenyl Ether	ug/kg	56	0	175	7000	Soil-S-1	513	803
4-Nitroaniline	ug/kg	56	4	900	57000	Soil-S-1	2954	5076
4-Nitrophenol	ug/kg	56	0	900	37000	Soil-S-1	2668	4185
Acenaphthene	ug/kg	56	9	37	4300	SA-P-2-SS	365	534
Acenaphthylene	ug/kg	56	0	175	7000	Soil-S-1	513	803
Anthracene	ug/kg	56	12	38	7000	Soil-S-1	520	808

Table III-B2
Calculations for Risk Assessment Modeling
Site-Wide - Soil
Sauget, IL

Analyte	Units	Site-Wide						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/kg	56	34	29	8000	Soil-S-1	669	1028
Benzo(a)pyrene	ug/kg	56	34	23	5400	Soil-S-1	629	938
Benzo(b)fluoranthene	ug/kg	56	34	30	6600	Soil-S-1	678	1015
Benzo(g,h,i)perylene	ug/kg	56	31	25	4300	SA-P-2-SS	534	782
Benzo(k)fluoranthene	ug/kg	56	33	26	6400	Soil-S-1	595	905
bis(2-Chloroethoxy)methane	ug/kg	56	0	175	7000	Soil-S-1	513	803
bis(2-Chloroethyl)ether	ug/kg	56	0	175	7000	Soil-S-1	513	803
bis(2-Ethylhexyl)phthalate	ug/kg	56	35	23	13000	Soil-Q-11	909	1429
Butyl Benzyl Phthalate	ug/kg	56	15	35	120000	Soil-S-1	4810	9927
Carbazole	ug/kg	56	8	63	7000	Soil-S-1	484	770
Chrysene	ug/kg	56	40	20	20000	Soil-S-1	915	1645
Dibenzo(a,h)anthracene	ug/kg	56	11	59	4300	SA-P-2-SS	409	592
Dibenzofuran	ug/kg	56	6	24	7000	Soil-S-1	498	789
Diethyl Phthalate	ug/kg	56	1	78	7000	Soil-S-1	511	800
Dimethyl Phthalate	ug/kg	56	0	175	7000	Soil-S-1	513	803
Di-n-butylphthalate	ug/kg	56	10	37	7000	Soil-S-1	489	781
Di-n-octylphthalate	ug/kg	56	2	175	4300	SA-P-2-SS	412	589
Fluoranthene	ug/kg	56	35	34	8000	Soil-Q-10-DUP	884	1298
Fluorene	ug/kg	56	8	34	4300	SA-P-2-SS	398	576
Hexachlorobenzene	ug/kg	56	5	55	7000	Soil-S-1	507	796
Hexachlorobutadiene	ug/kg	56	0	175	7000	Soil-S-1	513	803
Hexachlorocyclopentadiene	ug/kg	56	0	175	7000	Soil-S-1	513	803
Hexachloroethane	ug/kg	56	0	175	7000	Soil-S-1	513	803
Indeno(1,2,3-cd)pyrene	ug/kg	56	24	32	4300	SA-P-2-SS	407	589
Isophorone	ug/kg	56	3	175	7000	Soil-S-1	523	813
Naphthalene	ug/kg	56	7	28	4300	SA-P-2-SS	421	606
Nitrobenzene	ug/kg	56	0	175	7000	Soil-S-1	513	803
N-Nitroso-di-n-propylamine	ug/kg	56	0	175	7000	Soil-S-1	513	803
N-Nitrosodiphenylamine	ug/kg	56	0	175	7000	Soil-S-1	513	803
Pentachlorophenol	ug/kg	56	44	1.1	480000	Soil-O-5-SS	17335	39887
Phenanthrene	ug/kg	56	34	21	9200	Soil-S-1	777	1207
Phenol	ug/kg	56	1	175	7000	Soil-S-1	516	805
Pyrene	ug/kg	56	39	33	28000	Soil-S-1	1286	2318
Pesticides								
4,4'-DDD	ug/kg	36	7	1.2	1700	Soil-S-1	62	154
4,4'-DDE	ug/kg	35	13	0.71	3300	Soil-S-1	139	326
4,4'-DDT	ug/kg	36	29	0.81	16000	Soil-S-1	733	1608
Aldrin	ug/kg	36	2	0.70	900	Soil-S-1	31	80
alpha-BHC	ug/kg	36	2	0.90	900	Soil-S-1	40	90
alpha-Chlordane	ug/kg	36	14	0.15	900	Soil-S-1	33	82
beta-BHC	ug/kg	36	2	0.90	26000	Soil-S-1	728	2144
delta-BHC	ug/kg	36	1	0.90	740	Soil-S-1	27	67
Dieldrin	ug/kg	36	23	0.37	1800	Soil-S-1	99	199
Endosulfan I	ug/kg	36	0	0.90	900	Soil-S-1	31	80
Endosulfan II	ug/kg	36	5	1.0	5400	Soil-S-1	162	455
Endosulfan Sulfate	ug/kg	36	6	1.8	1800	Soil-S-1	65	162
Endrin	ug/kg	36	3	1.8	10000	Soil-S-1	294	838
Endrin Aldehyde	ug/kg	36	7	0.92	1800	Soil-S-1	65	162
Endrin Ketone	ug/kg	36	8	0.52	1800	Soil-S-1	65	162
gamma-BHC (Lindane)	ug/kg	36	3	0.90	7500	Soil-S-1	215	623
gamma-Chlordane	ug/kg	36	13	0.23	2700	Soil-S-1	111	260
Heptachlor	ug/kg	36	2	0.90	1500	Soil-S-1	48	129
Heptachlor Epoxide	ug/kg	36	13	0.23	900	Soil-S-1	35	83
Methoxychlor	ug/kg	36	2	0.88	9000	Soil-S-1	321	808
Toxaphene	ug/kg	36	0	90	90000	Soil-S-1	3124	7995
Herbicides								
2,4-D	ug/kg	56	19	4.6	10000	Soil-O-5-SS	296	666
2,4-DB	ug/kg	56	6	4.6	10000	Soil-O-5-SS	238	591
2,4,5-T	ug/kg	56	8	1.3	18000	Soil-S-1	556	1271
2,4,5-TP (Silvex)	ug/kg	56	3	2.3	10000	Soil-O-5-SS	239	592
Dalapon	ug/kg	56	0	180	390000	Soil-O-5-SS	10676	24474
Dicamba	ug/kg	56	3	2.0	10000	Soil-O-5-SS	245	599
Dichlorprop	ug/kg	56	17	1.2	120000	Soil-O-5-SS	2820	7069
Dinoseb	ug/kg	56	1	175	4300	SA-P-2-SS	419	599
MCPA	ug/kg	56	7	600	2350000	Soil-O-5-SS	55840	139025
MCPP	ug/kg	56	26	560	2350000	Soil-O-5-SS	60204	143247

Table III-B2
Calculations for Risk Assessment Modeling
Site-Wide - Soil
Sauget, IL

Analyte	Units	Site-Wide						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/kg	36	27	0.78	1008500	Soil-S-1	49829	115888
Dioxins/Furans								
TEQ	ug/kg	36	31	0.012	51	Soil-O-1	2.2	5.0
Metals								
Aluminum	mg/kg	56	56	2900	14000	Soil-Q-13	8066	8750
Antimony	mg/kg	56	45	0.44	47	Soil-Q-9	2.8	4.7
Arsenic	mg/kg	56	56	3.3	33	Soil-Q-9	8.9	10
Barium	mg/kg	56	56	77	1500	Soil-Q-11-DUP	321	409
Beryllium	mg/kg	56	56	0.28	1.8	Soil-P-1	0.65	0.73
Cadmium	mg/kg	56	52	0.25	8000	AT-Q-33-SS	149	428
Calcium	mg/kg	56	56	3200	190000	AT-P-5-SS	24304	32543
Chromium	mg/kg	56	56	8.0	660	Soil-Q-9	40	64
Cobalt	mg/kg	56	56	3.5	20	Soil-Q-9	8.2	9.1
Copper	mg/kg	56	56	7.0	2600	Soil-Q-11	195	296
Iron	mg/kg	56	56	6300	90000	Soil-Q-9	19707	23915
Lead	mg/kg	56	56	8.0	3100	Soil-Q-9	306	473
Magnesium	mg/kg	56	56	460	12000	AT-P-5-SS	4617	5190
Manganese	mg/kg	56	56	31	2700	AT-P-4-SS	504	615
Mercury	mg/kg	55	55	0.021	180	SA-O-1-SS/SA-O-1-SS-D	11	21
Nickel	mg/kg	56	56	11	500	Soil-Q-9	38	56
Potassium	mg/kg	56	56	550	2300	Various	1201	1312
Selenium	mg/kg	56	12	0.48	10	SA-O-1-SS-D	1.5	1.9
Silver	mg/kg	56	33	0.11	17	Soil-Q-11	1.6	2.4
Sodium	mg/kg	56	42	24	870	AT-Q-33-SS	201	244
Thallium	mg/kg	56	6	0.48	3.3	AT-Q-33-SS	1.2	1.3
Vanadium	mg/kg	56	56	13	260	AT-P-4-SS	29	38
Zinc	mg/kg	56	56	39	12000	AT-Q-33-SS	884	1346

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B3
Calculations for Risk Assessment Modeling
Off-Site Areas - Plant Tissue
Sauget, IL

Analyte	Units	Off-Site Areas						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	3	0	495	495	All	495	NA
1,2-Dichlorobenzene	ug/kg	3	0	495	495	All	495	NA
1,3-Dichlorobenzene	ug/kg	3	0	495	495	All	495	NA
1,4-Dichlorobenzene	ug/kg	3	0	495	495	All	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	3	0	495	495	All	495	NA
2,4,5-Trichlorophenol	ug/kg	3	0	495	495	All	495	NA
2,4,6-Trichlorophenol	ug/kg	3	0	495	495	All	495	NA
2,4-Dichlorophenol	ug/kg	3	0	495	495	All	495	NA
2,4-Dinitrophenol	ug/kg	3	0	2550	2550	All	2550	NA
2,4-Dinitrotoluene	ug/kg	3	0	495	495	All	495	NA
2,6-Dinitrotoluene	ug/kg	3	0	495	495	All	495	NA
2-Chloronaphthalene	ug/kg	3	0	495	495	All	495	NA
2-Chlorophenol	ug/kg	3	0	495	495	All	495	NA
2-Methylnaphthalene	ug/kg	3	0	495	495	All	495	NA
2-Methylphenol (o-Cresol)	ug/kg	3	0	495	495	All	495	NA
2-Nitroaniline	ug/kg	3	0	2550	2550	All	2550	NA
2-Nitrophenol	ug/kg	3	0	495	495	All	495	NA
3,3'-Dichlorobenzidine	ug/kg	3	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	3	0	495	495	All	495	NA
3-Nitroaniline	ug/kg	3	0	2550	2550	All	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	3	0	2550	2550	All	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	3	0	495	495	All	495	NA
4-Chloro-3-methylphenol	ug/kg	3	0	495	495	All	495	NA
4-Chloroaniline	ug/kg	3	0	1000	1000	All	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	3	0	495	495	All	495	NA
4-Nitroaniline	ug/kg	3	0	2550	2550	All	2550	NA
4-Nitrophenol	ug/kg	3	0	2550	2550	All	2550	NA
Acenaphthene	ug/kg	3	0	495	495	All	495	NA
Acenaphthylene	ug/kg	3	0	495	495	All	495	NA
Anthracene	ug/kg	3	0	495	495	All	495	NA
Benzo(a)anthracene	ug/kg	3	0	495	495	All	495	NA
Benzo(a)pyrene	ug/kg	3	0	495	495	All	495	NA
Benzo(b)fluoranthene	ug/kg	3	0	495	495	All	495	NA
Benzo(g,h,i)perylene	ug/kg	3	0	495	495	All	495	NA
Benzo(k)fluoranthene	ug/kg	3	0	495	495	All	495	NA
bis(2-Chloroethoxy)methane	ug/kg	3	0	495	495	All	495	NA
bis(2-Chloroethyl)ether	ug/kg	3	0	495	495	All	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	3	0	495	495	All	495	NA
Butyl Benzyl Phthalate	ug/kg	3	0	495	495	All	495	NA
Carbazole	ug/kg	3	0	495	495	All	495	NA
Chrysene	ug/kg	3	0	495	495	All	495	NA
Dibenzo(a,h)anthracene	ug/kg	3	0	495	495	All	495	NA
Dibenzofuran	ug/kg	3	0	495	495	All	495	NA
Diethyl Phthalate	ug/kg	3	0	495	495	All	495	NA
Dimethyl Phthalate	ug/kg	3	0	495	495	All	495	NA
Di-n-butylphthalate	ug/kg	3	0	495	495	All	495	NA
Di-n-octylphthalate	ug/kg	3	0	495	495	All	495	NA
Fluoranthene	ug/kg	3	0	495	495	All	495	NA
Fluorene	ug/kg	3	0	495	495	All	495	NA
Hexachlorobenzene	ug/kg	3	0	495	495	All	495	NA
Hexachlorobutadiene	ug/kg	3	0	495	495	All	495	NA
Hexachlorocyclopentadiene	ug/kg	3	0	495	495	All	495	NA
Hexachloroethane	ug/kg	3	0	495	495	All	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	3	0	495	495	All	495	NA
Isophorone	ug/kg	3	0	495	495	All	495	NA
Naphthalene	ug/kg	3	0	495	495	All	495	NA
Nitrobenzene	ug/kg	3	0	495	495	All	495	NA
N-Nitroso-di-n-propylamine	ug/kg	3	0	495	495	All	495	NA
N-Nitrosodiphenylamine	ug/kg	3	0	495	495	All	495	NA
Pentachlorophenol	ug/kg	3	0	26	2550	PL-OS-2	867	NA
Phenanthrene	ug/kg	3	0	495	495	All	495	NA
Phenol	ug/kg	3	0	495	495	All	495	NA
Pyrene	ug/kg	3	0	495	495	All	495	NA

Table III-B3
Calculations for Risk Assessment Modeling
Off-Site Areas - Plant Tissue
Sauget, IL

Analyte	Units	Off-Site Areas						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	3	0	5.0	5.0	All	5.0	NA
4,4'-DDE	ug/kg	3	0	5.0	5.0	All	5.0	NA
4,4'-DDT	ug/kg	3	2	1.3	5.0	PL-OS-4	3.0	NA
Aldrin	ug/kg	3	0	2.6	2.6	All	2.6	NA
alpha-BHC	ug/kg	3	0	2.6	2.6	All	2.6	NA
alpha-Chlordane	ug/kg	3	0	2.6	2.6	All	2.6	NA
beta-BHC	ug/kg	3	0	2.6	2.6	All	2.6	NA
delta-BHC	ug/kg	3	0	2.6	2.6	All	2.6	NA
Dieldrin	ug/kg	3	0	5.0	5.0	All	5.0	NA
Endosulfan I	ug/kg	3	0	2.6	2.6	All	2.6	NA
Endosulfan II	ug/kg	3	0	5.0	5.0	All	5.0	NA
Endosulfan Sulfate	ug/kg	3	0	5.0	5.0	All	5.0	NA
Endrin	ug/kg	3	0	5.0	5.0	All	5.0	NA
Endrin Aldehyde	ug/kg	3	0	5.0	5.0	All	5.0	NA
Endrin Ketone	ug/kg	3	0	5.0	5.0	All	5.0	NA
gamma-BHC (Lindane)	ug/kg	3	2	0.77	3.3	PL-OS-4	2.2	NA
gamma-Chlordane	ug/kg	3	0	2.6	2.6	All	2.6	NA
Heptachlor	ug/kg	3	1	1.6	2.6	PL-OS-2/PL-OS-3	2.2	NA
Heptachlor Epoxide	ug/kg	3	0	2.6	2.6	All	2.6	NA
Methoxychlor	ug/kg	3	0	26	26	All	26	NA
Toxaphene	ug/kg	3	0	255	255	All	255	NA
Herbicides								
2,4-D	ug/kg	3	2	34	1250	PL-OS-2	447	NA
2,4-DB	ug/kg	3	1	13	1250	PL-OS-2	574	NA
2,4,5-T	ug/kg	3	1	13	1250	PL-OS-2	432	NA
2,4,5-TP (Silvex)	ug/kg	3	0	13	1250	PL-OS-2	425	NA
Dalapon	ug/kg	3	0	3000	300000	PL-OS-2	102000	NA
Dicamba	ug/kg	3	0	30	3000	PL-OS-2	1020	NA
Dichlorprop	ug/kg	3	0	150	15000	PL-OS-2	5100	NA
Dinoseb	ug/kg	3	0	495	495	All	495	NA
MCPA	ug/kg	3	0	3000	300000	PL-OS-2	102000	NA
MCPP	ug/kg	3	0	3000	300000	PL-OS-3	102000	NA
PCBs								
Total PCBs	ug/kg	3	0	25	25	All	25	NA
Dioxins/Furans								
TEQ	pg/g	3	3	0.32	0.39	PL-OS-2	0.35	NA
Metals								
Aluminum	mg/kg	3	3	13	130	PL-OS-4	52	NA
Antimony	mg/kg	3	0	1.0	1.0	All	1.0	NA
Arsenic	mg/kg	3	0	0.50	0.50	All	0.50	NA
Barium	mg/kg	3	3	8.5	15	PL-OS-4	11	NA
Beryllium	mg/kg	3	0	0.20	0.20	All	0.20	NA
Cadmium	mg/kg	3	2	0.12	0.55	PL-OS-2	0.31	NA
Calcium	mg/kg	3	3	1300	3200	PL-OS-4	2133	NA
Chromium	mg/kg	3	3	0.18	0.51	PL-OS-4	0.33	NA
Cobalt	mg/kg	3	0	0.50	0.50	All	0.50	NA
Copper	mg/kg	3	3	2.7	4.6	PL-OS-2/PL-OS-3	4.0	NA
Iron	mg/kg	3	3	32	260	PL-OS-4	110	NA
Lead	mg/kg	3	3	0.46	1.4	PL-OS-2	0.93	NA
Magnesium	mg/kg	3	3	480	1100	PL-OS-4	713	NA
Manganese	mg/kg	3	3	3.9	20	PL-OS-2	12	NA
Mercury	mg/kg	3	3	0.21	0.76	PL-OS-2	0.40	NA
Nickel	mg/kg	3	0	2.0	2.0	All	2.0	NA
Potassium	mg/kg	3	3	4900	9600	PL-OS-2	6600	NA
Selenium	mg/kg	3	0	0.50	0.50	All	0.50	NA
Silver	mg/kg	3	0	0.50	0.50	All	0.50	NA
Sodium	mg/kg	3	0	25	25	All	25	NA
Thallium	mg/kg	3	0	0.50	0.50	All	0.50	NA
Vanadium	mg/kg	3	1	0.47	0.50	PL-OS-2/PL-OS-3	0.49	NA
Zinc	mg/kg	3	3	11	65	PL-OS-2	37	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B3
Calculations for Risk Assessment Modeling
Site P - Plant Tissue
Sauget, IL

Analyte	Units	Site P						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	4	0	495	495	All	495	NA
1,2-Dichlorobenzene	ug/kg	4	0	495	495	All	495	NA
1,3-Dichlorobenzene	ug/kg	4	0	495	495	All	495	NA
1,4-Dichlorobenzene	ug/kg	4	0	495	495	All	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	4	0	495	495	All	495	NA
2,4,5-Trichlorophenol	ug/kg	4	0	495	495	All	495	NA
2,4,6-Trichlorophenol	ug/kg	4	0	495	495	All	495	NA
2,4-Dichlorophenol	ug/kg	4	0	495	495	All	495	NA
2,4-Dimethylphenol	ug/kg	4	4	990	990	All	990	NA
2,4-Dinitrophenol	ug/kg	4	0	2550	2550	All	2550	NA
2,4-Dinitrotoluene	ug/kg	4	0	495	495	All	495	NA
2,6-Dinitrotoluene	ug/kg	4	0	495	495	All	495	NA
2-Chloronaphthalene	ug/kg	4	0	495	495	All	495	NA
2-Chlorophenol	ug/kg	4	0	495	495	All	495	NA
2-Methylnaphthalene	ug/kg	4	0	495	495	All	495	NA
2-Methylphenol (o-Cresol)	ug/kg	4	0	495	495	All	495	NA
2-Nitroaniline	ug/kg	4	0	2550	2550	All	2550	NA
2-Nitrophenol	ug/kg	4	0	495	495	All	495	NA
3,3'-Dichlorobenzidine	ug/kg	4	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	4	0	495	495	All	495	NA
3-Nitroaniline	ug/kg	4	0	2550	2550	All	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	4	0	2550	2550	All	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	4	0	495	495	All	495	NA
4-Chloro-3-methylphenol	ug/kg	4	0	495	495	All	495	NA
4-Chloroaniline	ug/kg	4	0	1000	1000	All	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	4	0	495	495	All	495	NA
4-Nitroaniline	ug/kg	4	0	2550	2550	All	2550	NA
4-Nitrophenol	ug/kg	4	0	2550	2550	All	2550	NA
Acenaphthene	ug/kg	4	0	495	495	All	495	NA
Acenaphthylene	ug/kg	4	0	495	495	All	495	NA
Anthracene	ug/kg	4	0	495	495	All	495	NA
Benzo(a)anthracene	ug/kg	4	0	495	495	All	495	NA
Benzo(a)pyrene	ug/kg	4	0	495	495	All	495	NA
Benzo(b)fluoranthene	ug/kg	4	0	495	495	All	495	NA
Benzo(g,h,i)perylene	ug/kg	4	3	80	495	PL-P-3	220	NA
Benzo(k)fluoranthene	ug/kg	4	0	495	495	All	495	NA
bis(2-Chloroethoxy)methane	ug/kg	4	0	495	495	All	495	NA
bis(2-Chloroethyl)ether	ug/kg	4	0	495	495	All	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	4	0	495	495	All	495	NA
Butyl Benzyl Phthalate	ug/kg	4	0	495	495	All	495	NA
Carbazole	ug/kg	4	0	495	495	All	495	NA
Chrysene	ug/kg	4	0	495	495	All	495	NA
Dibenzo(a,h)anthracene	ug/kg	4	0	495	495	All	495	NA
Dibenzofuran	ug/kg	4	0	495	495	All	495	NA
Diethyl Phthalate	ug/kg	4	0	495	495	All	495	NA
Dimethyl Phthalate	ug/kg	4	0	495	495	All	495	NA
Di-n-butylphthalate	ug/kg	4	0	495	495	All	495	NA
Di-n-octylphthalate	ug/kg	4	0	495	495	All	495	NA
Fluoranthene	ug/kg	4	0	495	495	All	495	NA
Fluorene	ug/kg	4	0	495	495	All	495	NA
Hexachlorobenzene	ug/kg	4	0	495	495	All	495	NA
Hexachlorobutadiene	ug/kg	4	0	495	495	All	495	NA
Hexachlorocyclopentadiene	ug/kg	4	0	495	495	All	495	NA
Hexachloroethane	ug/kg	4	0	495	495	All	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	4	0	495	495	All	495	NA
Isophorone	ug/kg	4	0	495	495	All	495	NA
Naphthalene	ug/kg	4	0	495	495	All	495	NA
Nitrobenzene	ug/kg	4	0	495	495	All	495	NA
N-Nitroso-di-n-propylamine	ug/kg	4	0	495	495	All	495	NA
N-Nitrosodiphenylamine	ug/kg	4	0	495	495	All	495	NA
Pentachlorophenol	ug/kg	4	0	25.5	25.5	All	26	NA
Phenanthrene	ug/kg	4	0	495	495	All	495	NA
Phenol	ug/kg	4	1	360	495	All (except PL-P-3)	461	NA
Pyrene	ug/kg	4	0	495	495	All	495	NA

Table III-B3
Calculations for Risk Assessment Modeling
Site P - Plant Tissue
Sauget, IL

Analyte	Units	Site P						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	4	0	5.0	10	PL-P-1	6.2	NA
4,4'-DDE	ug/kg	4	1	0.97	10	PL-P-1	5.2	NA
4,4'-DDT	ug/kg	4	1	1.4	10	PL-P-1	5.3	NA
Aldrin	ug/kg	4	3	0.5	2.6	PL-P-2	1.2	NA
alpha-BHC	ug/kg	4	1	1.2	2.6	All (except PL-P-1)	2.2	NA
alpha-Chlordane	ug/kg	4	1	0.93	5.0	PL-P-1	2.8	NA
beta-BHC	ug/kg	4	1	2.6	5.0	PL-P-1	3.3	NA
delta-BHC	ug/kg	4	1	1.2	2.6	All (except PL-P-1)	2.2	NA
Dieldrin	ug/kg	4	1	3.4	10	PL-P-1	5.8	NA
Endosulfan I	ug/kg	4	0	2.6	5.0	PL-P-1	3.2	NA
Endosulfan II	ug/kg	4	1	3.6	5.0	All (except PL-P-1)	4.6	NA
Endosulfan Sulfate	ug/kg	4	0	5.0	10	PL-P-1	6.2	NA
Endrin	ug/kg	4	0	5.0	10	PL-P-1	6.2	NA
Endrin Aldehyde	ug/kg	4	0	5.0	10	PL-P-1	6.2	NA
Endrin Ketone	ug/kg	4	1	2.6	10	PL-P-1	5.6	NA
gamma-BHC (Lindane)	ug/kg	4	2	2.0	2.6	PL-P-3/PL-P-4	2.3	NA
gamma-Chlordane	ug/kg	4	2	1.0	3.4	PL-P-1	2.4	NA
Heptachlor	ug/kg	4	1	2.6	5.5	PL-P-4	3.9	NA
Heptachlor Epoxide	ug/kg	4	1	2.6	7.6	PL-P-1	3.8	NA
Methoxychlor	ug/kg	4	1	26	190	PL-P-1	67	NA
Toxaphene	ug/kg	4	0	255	500	PL-P-1	316	NA
Herbicides								
2,4-D	ug/kg	4	3	13	68	PL-P-4	42	NA
2,4-DB	ug/kg	4	2	13	95	PL-P-3	45	NA
2,4,5-T	ug/kg	4	2	13	37	PL-P-4	20	NA
2,4,5-TP (Silvex)	ug/kg	4	1	13	87	PL-P-4	31	NA
Dalapon	ug/kg	4	0	3000	3000	All	3000	NA
Dicamba	ug/kg	4	0	30	30	All	30	NA
Dichlorprop	ug/kg	4	1	150	200	PL-P-3	163	NA
Dinoseb	ug/kg	4	0	495	495	All	495	NA
MCPA	ug/kg	4	1	3000	4800	PL-P-3	3450	NA
MCPP	ug/kg	4	1	3000	8800	PL-P-3	4450	NA
PCBs								
Total PCBs	ug/kg	4	0	25	25	All	25	NA
Dioxins/Furans								
TEQ	pg/g	4	4	0.45	0.67	PL-P-1	0.54	NA
Metals								
Aluminum	mg/kg	4	4	8.2	51	PL-P-4	28	NA
Antimony	mg/kg	4	1	0.52	1.0	PL-P-2/PL-P-4	0.86	NA
Arsenic	mg/kg	4	1	0.41	0.50	PL-P-1/PL-P-4	0.47	NA
Barium	mg/kg	4	4	3.9	5.4	PL-P-4	4.8	NA
Beryllium	mg/kg	4	0	0.18	0.20	All (except PL-P-3)	0.20	NA
Cadmium	mg/kg	4	4	0.17	0.55	PL-P-1	0.31	NA
Calcium	mg/kg	4	4	1200	3000	PL-P-1	1850	NA
Chromium	mg/kg	4	4	0.19	0.41	PL-P-1	0.31	NA
Cobalt	mg/kg	4	1	0.46	1.0	PL-P-1	0.61	NA
Copper	mg/kg	4	4	3.7	6.9	PL-P-1	5.0	NA
Iron	mg/kg	4	4	35	110	PL-P-4	71	NA
Lead	mg/kg	4	4	1.2	5.0	PL-P-4	3.3	NA
Magnesium	mg/kg	4	4	480	740	PL-P-1	588	NA
Manganese	mg/kg	4	4	6.0	7.9	PL-P-2	6.9	NA
Mercury	mg/kg	4	4	0.27	1.0	PL-P-1	0.52	NA
Nickel	mg/kg	4	1	1.8	3.9	PL-P-1	2.4	NA
Potassium	mg/kg	4	4	3200	4600	PL-P-1	4075	NA
Selenium	mg/kg	4	2	0.43	12	PL-P-1	3.4	NA
Silver	mg/kg	4	0	0.46	0.50	All (except PL-P-3)	0.49	NA
Sodium	mg/kg	4	1	25	340	PL-P-3	104	NA
Thallium	mg/kg	4	0	0.46	0.50	All (except PL-P-3)	0.49	NA
Vanadium	mg/kg	4	2	0.25	0.50	PL-P-2	0.39	NA
Zinc	mg/kg	4	4	31	79	PL-P-1	49	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B3
Calculations for Risk Assessment Modeling
Site R - Plant Tissue
Sauget, IL

Analyte	Units	Site R						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	5	0	495	495	All	495	NA
1,2-Dichlorobenzene	ug/kg	5	0	495	495	All	495	NA
1,3-Dichlorobenzene	ug/kg	5	0	495	495	All	495	NA
1,4-Dichlorobenzene	ug/kg	5	0	495	495	All	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	5	0	495	495	All	495	NA
2,4,5-Trichlorophenol	ug/kg	5	0	495	495	All	495	NA
2,4,6-Trichlorophenol	ug/kg	5	0	495	495	All	495	NA
2,4-Dichlorophenol	ug/kg	5	0	495	495	All	495	NA
2,4-Dinitrophenol	ug/kg	5	0	2550	2550	All	2550	NA
2,4-Dinitrotoluene	ug/kg	5	0	495	495	All	495	NA
2,6-Dinitrotoluene	ug/kg	5	0	495	495	All	495	NA
2-Chloronaphthalene	ug/kg	5	0	495	495	All	495	NA
2-Chlorophenol	ug/kg	5	0	495	495	All	495	NA
2-Methylnaphthalene	ug/kg	5	0	495	495	All	495	NA
2-Methylphenol (o-Cresol)	ug/kg	5	0	495	495	All	495	NA
2-Nitroaniline	ug/kg	5	0	2550	2550	All	2550	NA
2-Nitrophenol	ug/kg	5	0	495	495	All	495	NA
3,3'-Dichlorobenzidine	ug/kg	5	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	5	0	495	495	All	495	NA
3-Nitroaniline	ug/kg	5	0	2550	2550	All	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	5	0	2550	2550	All	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	5	0	495	495	All	495	NA
4-Chloro-3-methylphenol	ug/kg	5	0	495	495	All	495	NA
4-Chloroaniline	ug/kg	5	0	1000	1000	All	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	5	0	495	495	All	495	NA
4-Nitroaniline	ug/kg	5	0	2550	2550	All	2550	NA
4-Nitrophenol	ug/kg	5	0	2550	2550	All	2550	NA
Acenaphthene	ug/kg	5	0	495	495	All	495	NA
Acenaphthylene	ug/kg	5	0	495	495	All	495	NA
Anthracene	ug/kg	5	0	495	495	All	495	NA
Benzo(a)anthracene	ug/kg	5	0	495	495	All	495	NA
Benzo(a)pyrene	ug/kg	5	0	495	495	All	495	NA
Benzo(b)fluoranthene	ug/kg	5	0	495	495	All	495	NA
Benzo(g,h,i)perylene	ug/kg	5	0	495	495	All	495	NA
Benzo(k)fluoranthene	ug/kg	5	0	495	495	All	495	NA
bis(2-Chloroethoxy)methane	ug/kg	5	0	495	495	All	495	NA
bis(2-Chloroethyl)ether	ug/kg	5	0	495	495	All	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	5	0	495	495	All	495	NA
Butyl Benzyl Phthalate	ug/kg	5	0	495	495	All	495	NA
Carbazole	ug/kg	5	0	495	495	All	495	NA
Chrysene	ug/kg	5	0	495	495	All	495	NA
Dibenzo(a,h)anthracene	ug/kg	5	0	495	495	All	495	NA
Dibenzofuran	ug/kg	5	0	495	495	All	495	NA
Diethyl Phthalate	ug/kg	5	0	495	495	All	495	NA
Dimethyl Phthalate	ug/kg	5	0	495	495	All	495	NA
Di-n-butylphthalate	ug/kg	5	1	89	495	All	414	NA
Di-n-octylphthalate	ug/kg	5	0	495	495	All	495	NA
Fluoranthene	ug/kg	5	0	495	495	All	495	NA
Fluorene	ug/kg	5	0	495	495	All	495	NA
Hexachlorobenzene	ug/kg	5	0	495	495	All	495	NA
Hexachlorobutadiene	ug/kg	5	0	495	495	All	495	NA
Hexachlorocyclopentadiene	ug/kg	5	0	495	495	All	495	NA
Hexachloroethane	ug/kg	5	0	495	495	All	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	5	0	495	495	All	495	NA
Isophorone	ug/kg	5	0	495	495	All	495	NA
Naphthalene	ug/kg	5	0	495	495	All	495	NA
Nitrobenzene	ug/kg	5	0	495	495	All	495	NA
N-Nitroso-di-n-propylamine	ug/kg	5	0	495	495	All	495	NA
N-Nitrosodiphenylamine	ug/kg	5	0	495	495	All	495	NA
Pentachlorophenol	ug/kg	5	0	26	26	All	26	NA
Phenanthrene	ug/kg	5	0	495	495	All	495	NA
Phenol	ug/kg	5	0	495	495	All	495	NA
Pyrene	ug/kg	5	0	495	495	All	495	NA

Table III-B3
Calculations for Risk Assessment Modeling
Site R - Plant Tissue
Sauget, IL

Analyte	Units	Site R						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	5	1	1.1	5.0	All (except PL-R-3)	4.2	NA
4,4'-DDE	ug/kg	5	0	5.0	5.0	All	5.0	NA
4,4'-DDT	ug/kg	5	4	1.5	5.0	PL-R-3	2.5	NA
Aldrin	ug/kg	5	0	2.6	2.6	All	2.6	NA
alpha-BHC	ug/kg	5	0	2.6	2.6	All	2.6	NA
alpha-Chlordane	ug/kg	5	0	2.6	2.6	All	2.6	NA
beta-BHC	ug/kg	5	4	1.9	5.2	PL-R-2	3.4	NA
delta-BHC	ug/kg	5	0	2.6	2.6	All	2.6	NA
Dieldrin	ug/kg	5	5	0.92	2.9	PL-R-3	2.0	NA
Endosulfan I	ug/kg	5	0	2.6	2.6	All	2.6	NA
Endosulfan II	ug/kg	5	4	2.0	5.0	PL-R-3	3.0	NA
Endosulfan Sulfate	ug/kg	5	2	1.4	5.0	Various	3.7	NA
Endrin	ug/kg	5	0	5.0	5.0	All	5.0	NA
Endrin Aldehyde	ug/kg	5	0	5.0	5.0	All	5.0	NA
Endrin Ketone	ug/kg	5	0	5.0	5.0	All	5.0	NA
gamma-BHC (Lindane)	ug/kg	5	3	0.79	2.6	PL-R-2/PL-R-4	1.7	NA
gamma-Chlordane	ug/kg	5	0	2.6	2.6	All	2.6	NA
Heptachlor	ug/kg	5	4	1.4	2.6	PL-R-1	2.2	NA
Heptachlor Epoxide	ug/kg	5	1	0.52	2.6	All (except PL-R-2)	2.1	NA
Methoxychlor	ug/kg	5	0	26	26	All	26	NA
Toxaphene	ug/kg	5	0	255	255	All	255	NA
Herbicides								
2,4-D	ug/kg	5	5	26	64	PL-R-4	45	NA
2,4-DB	ug/kg	5	3	13	87	PL-R-4	40	NA
2,4,5-T	ug/kg	5	0	13	13	All	13	NA
2,4,5-TP (Silvex)	ug/kg	5	0	13	13	All	13	NA
Dalapon	ug/kg	5	0	3000	3000	All	3000	NA
Dicamba	ug/kg	5	0	30	30	All	30	NA
Dichlorprop	ug/kg	5	0	150	150	All	150	NA
Dinoseb	ug/kg	5	0	495	495	All	495	NA
MCPA	ug/kg	5	1	3000	4800	PL-R-1	3360	NA
MCPP	ug/kg	5	0	3000	3000	All	3000	NA
PCBs								
Total PCBs	ug/kg	5	0	25	25	All	25	NA
Dioxins/Furans								
TEQ	pg/g	5	5	0.31	1.2	PL-R-5	0.55	NA
Metals								
Aluminum	mg/kg	5	5	12	37	PL-R-3	23	NA
Antimony	mg/kg	5	0	0.90	1.0	PL-R-4	0.92	NA
Arsenic	mg/kg	5	0	0.46	0.50	PL-R-4	0.46	NA
Barium	mg/kg	5	5	7.1	13	PL-R-2	9.4	NA
Beryllium	mg/kg	5	0	0.18	0.20	PL-R-4	0.18	NA
Cadmium	mg/kg	5	5	0.089	0.35	PL-R-1	0.20	NA
Calcium	mg/kg	5	5	1400	2100	PL-R-1	1720	NA
Chromium	mg/kg	5	5	0.18	0.50	PL-R-2	0.28	NA
Cobalt	mg/kg	5	0	0.46	0.50	PL-R-4	0.46	NA
Copper	mg/kg	5	5	2.5	3.5	PL-R-2	2.8	NA
Iron	mg/kg	5	5	38	72	PL-R-3	51	NA
Lead	mg/kg	5	5	2.1	7.6	PL-R-1	4.0	NA
Magnesium	mg/kg	5	5	740	1200	PL-R-1	960	NA
Manganese	mg/kg	5	5	6.7	9.7	PL-R-3	8.6	NA
Mercury	mg/kg	5	5	0.91	2.5	PL-R-4	1.6	NA
Nickel	mg/kg	5	0	1.8	2.0	PL-R-4	1.8	NA
Potassium	mg/kg	5	5	5300	7100	PL-R-4	6280	NA
Selenium	mg/kg	5	0	0.46	0.50	PL-R-4	0.46	NA
Silver	mg/kg	5	0	0.46	0.50	PL-R-4	0.46	NA
Sodium	mg/kg	5	0	23	25	PL-R-4	23	NA
Thallium	mg/kg	5	0	0.46	0.50	PL-R-4	0.46	NA
Vanadium	mg/kg	5	0	0.46	0.50	PL-R-4	0.46	NA
Zinc	mg/kg	5	5	17	44	PL-R-2	26	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B3
Calculations for Risk Assessment Modeling
Site O - Plant Tissue
Sauget, IL

Analyte	Units	Site O						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	3	0	495	495	All	495	NA
1,2-Dichlorobenzene	ug/kg	3	0	495	495	All	495	NA
1,3-Dichlorobenzene	ug/kg	3	0	495	495	All	495	NA
1,4-Dichlorobenzene	ug/kg	3	0	495	495	All	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	3	0	495	495	All	495	NA
2,4,5-Trichlorophenol	ug/kg	3	0	495	495	All	495	NA
2,4,6-Trichlorophenol	ug/kg	3	0	495	495	All	495	NA
2,4-Dichlorophenol	ug/kg	3	0	495	495	All	495	NA
2,4-Dinitrophenol	ug/kg	3	0	2550	2550	All	2550	NA
2,4-Dinitrotoluene	ug/kg	3	0	495	495	All	495	NA
2,6-Dinitrotoluene	ug/kg	3	0	495	495	All	495	NA
2-Chloronaphthalene	ug/kg	3	0	495	495	All	495	NA
2-Chlorophenol	ug/kg	3	0	495	495	All	495	NA
2-Methylnaphthalene	ug/kg	3	0	495	495	All	495	NA
2-Methylphenol (o-Cresol)	ug/kg	3	0	495	495	All	495	NA
2-Nitroaniline	ug/kg	3	0	2550	2550	All	2550	NA
2-Nitrophenol	ug/kg	3	0	495	495	All	495	NA
3,3'-Dichlorobenzidine	ug/kg	3	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	3	0	495	495	All	495	NA
3-Nitroaniline	ug/kg	3	0	2550	2550	All	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	3	0	2550	2550	All	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	3	0	495	495	All	495	NA
4-Chloro-3-methylphenol	ug/kg	3	0	495	495	All	495	NA
4-Chloroaniline	ug/kg	3	0	1000	1000	All	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	3	0	495	495	All	495	NA
4-Nitroaniline	ug/kg	3	0	2550	2550	All	2550	NA
4-Nitrophenol	ug/kg	3	0	2550	2550	All	2550	NA
Acenaphthene	ug/kg	3	0	495	495	All	495	NA
Acenaphthylene	ug/kg	3	0	495	495	All	495	NA
Anthracene	ug/kg	3	0	495	495	All	495	NA
Benzo(a)anthracene	ug/kg	3	0	495	495	All	495	NA
Benzo(a)pyrene	ug/kg	3	0	495	495	All	495	NA
Benzo(b)fluoranthene	ug/kg	3	0	495	495	All	495	NA
Benzo(g,h,i)perylene	ug/kg	3	0	495	495	All	495	NA
Benzo(k)fluoranthene	ug/kg	3	0	495	495	All	495	NA
bis(2-Chloroethoxy)methane	ug/kg	3	0	495	495	All	495	NA
bis(2-Chloroethyl)ether	ug/kg	3	0	495	495	All	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	3	0	495	495	All	495	NA
Butyl Benzyl Phthalate	ug/kg	3	0	495	495	All	495	NA
Carbazole	ug/kg	3	0	495	495	All	495	NA
Chrysene	ug/kg	3	0	495	495	All	495	NA
Dibenzo(a,h)anthracene	ug/kg	3	0	495	495	All	495	NA
Dibenzofuran	ug/kg	3	0	495	495	All	495	NA
Diethyl Phthalate	ug/kg	3	0	495	495	All	495	NA
Dimethyl Phthalate	ug/kg	3	0	495	495	All	495	NA
Di-n-butylphthalate	ug/kg	3	0	495	495	All	495	NA
Di-n-octylphthalate	ug/kg	3	0	495	495	All	495	NA
Fluoranthene	ug/kg	3	0	495	495	All	495	NA
Fluorene	ug/kg	3	0	495	495	All	495	NA
Hexachlorobenzene	ug/kg	3	0	495	495	All	495	NA
Hexachlorobutadiene	ug/kg	3	0	495	495	All	495	NA
Hexachlorocyclopentadiene	ug/kg	3	0	495	495	All	495	NA
Hexachloroethane	ug/kg	3	0	495	495	All	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	3	0	495	495	All	495	NA
Isophorone	ug/kg	3	0	495	495	All	495	NA
Naphthalene	ug/kg	3	0	495	495	All	495	NA
Nitrobenzene	ug/kg	3	0	495	495	All	495	NA
N-Nitroso-di-n-propylamine	ug/kg	3	0	495	495	All	495	NA
N-Nitrosodiphenylamine	ug/kg	3	0	495	495	All	495	NA
Pentachlorophenol	ug/kg	3	0	26	130	PL-O-3	60	NA
Phenanthrene	ug/kg	3	0	495	495	All	495	NA
Phenol	ug/kg	3	0	495	495	All	495	NA
Pyrene	ug/kg	3	0	495	495	All	495	NA

Table III-B3
Calculations for Risk Assessment Modeling
Site O - Plant Tissue
Sauget, IL

Analyte	Units	Site O						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	3	1	2.4	5.0	PL-O-1/PL-O-3	4.1	NA
4,4'-DDE	ug/kg	3	1	5.0	10	PL-O-2	6.6	NA
4,4'-DDT	ug/kg	3	0	5.0	5.0	All	5.0	NA
Aldrin	ug/kg	3	1	2.6	5.1	PL-O-2	3.4	NA
alpha-BHC	ug/kg	3	0	2.6	2.6	All	2.6	NA
alpha-Chlordane	ug/kg	3	0	2.6	2.6	All	2.6	NA
beta-BHC	ug/kg	3	1	2.6	4.4	PL-O-2	3.2	NA
delta-BHC	ug/kg	3	0	2.6	2.6	All	2.6	NA
Dieldrin	ug/kg	3	0	5.0	5.0	All	5.0	NA
Endosulfan I	ug/kg	3	0	2.6	2.6	All	2.6	NA
Endosulfan II	ug/kg	3	1	5.0	5.4	PL-O-2	5.1	NA
Endosulfan Sulfate	ug/kg	3	0	5.0	5.0	All	5.0	NA
Endrin	ug/kg	3	1	2.0	5.0	PL-O-1/PL-O-3	4.0	NA
Endrin Aldehyde	ug/kg	3	1	5.0	25	PL-O-2	12	NA
Endrin Ketone	ug/kg	3	1	2.2	5.0	PL-O-1/PL-O-3	4.0	NA
gamma-BHC (Lindane)	ug/kg	3	2	2.6	9.8	PL-O-2	5.1	NA
gamma-Chlordane	ug/kg	3	1	2.6	5.7	PL-O-2	3.6	NA
Heptachlor	ug/kg	3	1	2.6	3.4	PL-O-2	2.8	NA
Heptachlor Epoxide	ug/kg	3	0	2.6	2.6	All	2.6	NA
Methoxychlor	ug/kg	3	0	26	26	All	26	NA
Toxaphene	ug/kg	3	0	255	255	All	255	NA
Herbicides								
2,4-D	ug/kg	3	2	13	110	PL-O-3	52	NA
2,4-DB	ug/kg	3	1	13	1300	PL-O-3	442	NA
2,4,5-T	ug/kg	3	0	13	60	PL-O-3	28	NA
2,4,5-TP (Silvex)	ug/kg	3	0	13	60	PL-O-3	28	NA
Dalapon	ug/kg	3	0	3000	15000	PL-O-3	7000	NA
Dicamba	ug/kg	3	0	30	150	PL-O-3	70	NA
Dichlorprop	ug/kg	3	2	170	750	PL-O-3	367	NA
Dinoseb	ug/kg	3	0	495	495	All	495	NA
MCPA	ug/kg	3	1	3000	15000	PL-O-3	7900	NA
MCPP	ug/kg	3	0	3000	15000	PL-O-3	7000	NA
PCBs								
Total PCBs	ug/kg	3	0	25	25	All	25	NA
Dioxins/Furans								
TEQ	pg/g	3	3	0.39	4.3	PL-O-1	1.8	NA
Metals								
Aluminum	mg/kg	3	3	7.5	14	PL-O-2	9.9	NA
Antimony	mg/kg	3	0	0.90	1.0	PL-O-3	0.93	NA
Arsenic	mg/kg	3	0	0.46	0.50	PL-O-3	0.47	NA
Barium	mg/kg	3	3	2.5	7.6	PL-O-2	5.1	NA
Beryllium	mg/kg	3	0	0.18	0.20	PL-O-3	0.19	NA
Cadmium	mg/kg	3	3	0.13	0.20	PL-O-1	0.15	NA
Calcium	mg/kg	3	3	1200	3600	PL-O-2	2133	NA
Chromium	mg/kg	3	2	0.21	0.46	PL-O-2	0.33	NA
Cobalt	mg/kg	3	0	0.46	0.50	PL-O-3	0.47	NA
Copper	mg/kg	3	3	3.5	4.0	PL-O-2/PL-O-3	3.8	NA
Iron	mg/kg	3	3	24	42	PL-O-2	31	NA
Lead	mg/kg	3	3	0.65	1.4	PL-O-2	0.93	NA
Magnesium	mg/kg	3	3	560	810	PL-O-3	717	NA
Manganese	mg/kg	3	3	10	12	PL-O-1	11	NA
Mercury	mg/kg	3	3	0.14	0.91	PL-O-2	0.41	NA
Nickel	mg/kg	3	0	1.8	2.0	PL-O-3	1.9	NA
Potassium	mg/kg	3	3	3200	5800	PL-O-2	4167	NA
Selenium	mg/kg	3	0	0.46	0.50	PL-O-3	0.47	NA
Silver	mg/kg	3	0	0.46	0.50	PL-O-3	0.47	NA
Sodium	mg/kg	3	0	23	25	PL-O-3	23	NA
Thallium	mg/kg	3	0	0.46	0.50	PL-O-3	0.47	NA
Vanadium	mg/kg	3	0	0.46	0.50	PL-O-3	0.47	NA
Zinc	mg/kg	3	3	18	25	PL-O-2	22	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B3
Calculations for Risk Assessment Modeling
Site S - Plant Tissue
Sauget, IL

Analyte	Units	Site S						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	1	0	495	495	PL-S-1	495	NA
1,2-Dichlorobenzene	ug/kg	1	0	495	495	PL-S-1	495	NA
1,3-Dichlorobenzene	ug/kg	1	0	495	495	PL-S-1	495	NA
1,4-Dichlorobenzene	ug/kg	1	0	495	495	PL-S-1	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	1	0	495	495	PL-S-1	495	NA
2,4,5-Trichlorophenol	ug/kg	1	0	495	495	PL-S-1	495	NA
2,4,6-Trichlorophenol	ug/kg	1	0	495	495	PL-S-1	495	NA
2,4-Dichlorophenol	ug/kg	1	0	495	495	PL-S-1	495	NA
2,4-Dinitrophenol	ug/kg	1	0	2550	2550	PL-S-1	2550	NA
2,4-Dinitrotoluene	ug/kg	1	0	495	495	PL-S-1	495	NA
2,6-Dinitrotoluene	ug/kg	1	0	495	495	PL-S-1	495	NA
2-Chloronaphthalene	ug/kg	1	0	495	495	PL-S-1	495	NA
2-Chlorophenol	ug/kg	1	0	495	495	PL-S-1	495	NA
2-Methylnaphthalene	ug/kg	1	0	495	495	PL-S-1	495	NA
2-Methylphenol (o-Cresol)	ug/kg	1	0	495	495	PL-S-1	495	NA
2-Nitroaniline	ug/kg	1	0	2550	2550	PL-S-1	2550	NA
2-Nitrophenol	ug/kg	1	0	495	495	PL-S-1	495	NA
3,3'-Dichlorobenzidine	ug/kg	1	0	1000	1000	PL-S-1	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	1	0	495	495	PL-S-1	495	NA
3-Nitroaniline	ug/kg	1	0	2550	2550	PL-S-1	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	1	0	2550	2550	PL-S-1	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	1	0	495	495	PL-S-1	495	NA
4-Chloro-3-methylphenol	ug/kg	1	0	495	495	PL-S-1	495	NA
4-Chloroaniline	ug/kg	1	0	1000	1000	PL-S-1	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	1	0	495	495	PL-S-1	495	NA
4-Nitroaniline	ug/kg	1	0	2550	2550	PL-S-1	2550	NA
4-Nitrophenol	ug/kg	1	0	2550	2550	PL-S-1	2550	NA
Acenaphthene	ug/kg	1	0	495	495	PL-S-1	495	NA
Acenaphthylene	ug/kg	1	0	495	495	PL-S-1	495	NA
Anthracene	ug/kg	1	0	495	495	PL-S-1	495	NA
Benzo(a)anthracene	ug/kg	1	0	495	495	PL-S-1	495	NA
Benzo(a)pyrene	ug/kg	1	0	495	495	PL-S-1	495	NA
Benzo(b)fluoranthene	ug/kg	1	0	495	495	PL-S-1	495	NA
Benzo(g,h,i)perylene	ug/kg	1	0	495	495	PL-S-1	495	NA
Benzo(k)fluoranthene	ug/kg	1	0	495	495	PL-S-1	495	NA
bis(2-Chloroethoxy)methane	ug/kg	1	0	495	495	PL-S-1	495	NA
bis(2-Chloroethyl)ether	ug/kg	1	0	495	495	PL-S-1	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	1	1	82	82	PL-S-1	82	NA
Butyl Benzyl Phthalate	ug/kg	1	0	495	495	PL-S-1	495	NA
Carbazole	ug/kg	1	0	495	495	PL-S-1	495	NA
Chrysene	ug/kg	1	0	495	495	PL-S-1	495	NA
Dibenzo(a,h)anthracene	ug/kg	1	0	495	495	PL-S-1	495	NA
Dibenzofuran	ug/kg	1	0	495	495	PL-S-1	495	NA
Diethyl Phthalate	ug/kg	1	0	495	495	PL-S-1	495	NA
Dimethyl Phthalate	ug/kg	1	0	495	495	PL-S-1	495	NA
Di-n-butylphthalate	ug/kg	1	0	495	495	PL-S-1	495	NA
Di-n-octylphthalate	ug/kg	1	0	495	495	PL-S-1	495	NA
Fluoranthene	ug/kg	1	0	495	495	PL-S-1	495	NA
Fluorene	ug/kg	1	0	495	495	PL-S-1	495	NA
Hexachlorobenzene	ug/kg	1	0	495	495	PL-S-1	495	NA
Hexachlorobutadiene	ug/kg	1	0	495	495	PL-S-1	495	NA
Hexachlorocyclopentadiene	ug/kg	1	0	495	495	PL-S-1	495	NA
Hexachloroethane	ug/kg	1	0	495	495	PL-S-1	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	1	0	495	495	PL-S-1	495	NA
Isophorone	ug/kg	1	0	495	495	PL-S-1	495	NA
Naphthalene	ug/kg	1	0	495	495	PL-S-1	495	NA
Nitrobenzene	ug/kg	1	0	495	495	PL-S-1	495	NA
N-Nitroso-di-n-propylamine	ug/kg	1	0	495	495	PL-S-1	495	NA
N-Nitrosodiphenylamine	ug/kg	1	0	495	495	PL-S-1	495	NA
Pentachlorophenol	ug/kg	1	0	26	26	PL-S-1	26	NA
Phenanthrene	ug/kg	1	0	495	495	PL-S-1	495	NA
Phenol	ug/kg	1	0	495	495	PL-S-1	495	NA
Pyrene	ug/kg	1	0	495	495	PL-S-1	495	NA

Table III-B3
Calculations for Risk Assessment Modeling
Site S - Plant Tissue
Sauget, IL

Analyte	Units	Site S						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	1	0	5.0	5.0	PL-S-1	5.0	NA
4,4'-DDE	ug/kg	1	0	5.0	5.0	PL-S-1	5.0	NA
4,4'-DDT	ug/kg	1	1	1.5	1.5	PL-S-1	1.5	NA
Aldrin	ug/kg	1	0	2.6	2.6	PL-S-1	2.6	NA
alpha-BHC	ug/kg	1	0	2.6	2.6	PL-S-1	2.6	NA
alpha-Chlordane	ug/kg	1	0	2.6	2.6	PL-S-1	2.6	NA
beta-BHC	ug/kg	1	0	2.6	2.6	PL-S-1	2.6	NA
delta-BHC	ug/kg	1	0	2.6	2.6	PL-S-1	2.6	NA
Dieldrin	ug/kg	1	0	5.0	5.0	PL-S-1	5.0	NA
Endosulfan I	ug/kg	1	0	2.6	2.6	PL-S-1	2.6	NA
Endosulfan II	ug/kg	1	0	5.0	5.0	PL-S-1	5.0	NA
Endosulfan Sulfate	ug/kg	1	0	5.0	5.0	PL-S-1	5.0	NA
Endrin	ug/kg	1	0	5.0	5.0	PL-S-1	5.0	NA
Endrin Aldehyde	ug/kg	1	0	5.0	5.0	PL-S-1	5.0	NA
Endrin Ketone	ug/kg	1	0	5.0	5.0	PL-S-1	5.0	NA
gamma-BHC (Lindane)	ug/kg	1	1	5.8	5.8	PL-S-1	5.8	NA
gamma-Chlordane	ug/kg	1	0	2.6	2.6	PL-S-1	2.6	NA
Heptachlor	ug/kg	1	0	2.6	2.6	PL-S-1	2.6	NA
Heptachlor Epoxide	ug/kg	1	0	2.6	2.6	PL-S-1	2.6	NA
Methoxychlor	ug/kg	1	0	26	26	PL-S-1	26	NA
Toxaphene	ug/kg	1	0	255	255	PL-S-1	255	NA
Herbicides								
2,4-D	ug/kg	1	0	13	13	PL-S-1	13	NA
2,4-DB	ug/kg	1	0	13	13	PL-S-1	13	NA
2,4,5-T	ug/kg	1	0	13	13	PL-S-1	13	NA
2,4,5-TP (Silvex)	ug/kg	1	0	13	13	PL-S-1	13	NA
Dalapon	ug/kg	1	0	3000	3000	PL-S-1	3000	NA
Dicamba	ug/kg	1	0	30	30	PL-S-1	30	NA
Dichlorprop	ug/kg	1	0	150	150	PL-S-1	150	NA
Dinoseb	ug/kg	1	0	495	495	PL-S-1	495	NA
MCPA	ug/kg	1	1	5100	5100	PL-S-1	5100	NA
MCPP	ug/kg	1	0	3000	3000	PL-S-1	3000	NA
PCBs								
Total PCBs	ug/kg	1	0	25	25	PL-S-1	25	NA
Dioxins/Furans								
TEQ	pg/g	1	1	0.37	0.37	PL-S-1	0.37	NA
Metals								
Aluminum	mg/kg	1	1	9.5	9.5	PL-S-1	9.5	NA
Antimony	mg/kg	1	0	1.0	1.0	PL-S-1	1.0	NA
Arsenic	mg/kg	1	0	0.50	0.50	PL-S-1	0.50	NA
Barium	mg/kg	1	1	5.4	5.4	PL-S-1	5.4	NA
Beryllium	mg/kg	1	0	0.20	0.20	PL-S-1	0.20	NA
Cadmium	mg/kg	1	0	0.25	0.25	PL-S-1	0.25	NA
Calcium	mg/kg	1	1	1800	1800	PL-S-1	1800	NA
Chromium	mg/kg	1	1	0.24	0.24	PL-S-1	0.24	NA
Cobalt	mg/kg	1	0	0.50	0.50	PL-S-1	0.50	NA
Copper	mg/kg	1	1	3.8	3.8	PL-S-1	3.8	NA
Iron	mg/kg	1	1	37	37	PL-S-1	37	NA
Lead	mg/kg	1	1	0.99	0.99	PL-S-1	0.99	NA
Magnesium	mg/kg	1	1	770	770	PL-S-1	770	NA
Manganese	mg/kg	1	1	6.7	6.7	PL-S-1	6.7	NA
Mercury	mg/kg	1	1	1.3	1.3	PL-S-1	1.3	NA
Nickel	mg/kg	1	1	2.6	2.6	PL-S-1	2.6	NA
Potassium	mg/kg	1	1	4000	4000	PL-S-1	4000	NA
Selenium	mg/kg	1	0	0.50	0.50	PL-S-1	0.50	NA
Silver	mg/kg	1	0	0.50	0.50	PL-S-1	0.50	NA
Sodium	mg/kg	1	0	25	25	PL-S-1	25	NA
Thallium	mg/kg	1	0	0.50	0.50	PL-S-1	0.50	NA
Vanadium	mg/kg	1	0	0.50	0.50	PL-S-1	0.50	NA
Zinc	mg/kg	1	1	17	17	PL-S-1	17	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B3
Calculations for Risk Assessment Modeling
Site Q - Plant Tissue
Sauget, IL

Analyte	Units	Site Q						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	13	0	495	495	All	495	NA
1,2-Dichlorobenzene	ug/kg	13	0	495	495	All	495	NA
1,3-Dichlorobenzene	ug/kg	13	0	495	495	All	495	NA
1,4-Dichlorobenzene	ug/kg	13	0	495	495	All	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	13	0	495	495	All	495	NA
2,4,5-Trichlorophenol	ug/kg	13	0	495	495	All	495	NA
2,4,6-Trichlorophenol	ug/kg	13	0	495	495	All	495	NA
2,4-Dichlorophenol	ug/kg	13	0	495	495	All	495	NA
2,4-Dimethylphenol	ug/kg	13	0	495	495	All	495	NA
2,4-Dinitrophenol	ug/kg	13	0	2550	2550	All	2550	NA
2,4-Dinitrotoluene	ug/kg	13	0	495	495	All	495	NA
2,6-Dinitrotoluene	ug/kg	13	0	495	495	All	495	NA
2-Chloronaphthalene	ug/kg	13	0	495	495	All	495	NA
2-Chlorophenol	ug/kg	13	0	495	495	All	495	NA
2-Methylnaphthalene	ug/kg	13	0	495	495	All	495	NA
2-Methylphenol (o-Cresol)	ug/kg	13	0	495	495	All	495	NA
2-Nitroaniline	ug/kg	13	0	2550	2550	All	2550	NA
2-Nitrophenol	ug/kg	13	0	495	495	All	495	NA
3,3'-Dichlorobenzidine	ug/kg	13	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	13	0	495	495	All	495	NA
3-Nitroaniline	ug/kg	13	0	2550	2550	All	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	13	0	2550	2550	All	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	13	0	495	495	All	495	NA
4-Chloro-3-methylphenol	ug/kg	13	0	495	495	All	495	NA
4-Chloroaniline	ug/kg	13	0	1000	1000	All	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	13	0	495	495	All	495	NA
4-Nitroaniline	ug/kg	13	0	2550	2550	All	2550	NA
4-Nitrophenol	ug/kg	13	0	2550	2550	All	2550	NA
Acenaphthene	ug/kg	13	0	495	495	All	495	NA
Acenaphthylene	ug/kg	13	0	495	495	All	495	NA
Anthracene	ug/kg	13	0	495	495	All	495	NA
Benzo(a)anthracene	ug/kg	13	0	495	495	All	495	NA
Benzo(a)pyrene	ug/kg	13	0	495	495	All	495	NA
Benzo(b)fluoranthene	ug/kg	13	0	495	495	All	495	NA
Benzo(g,h,i)perylene	ug/kg	13	0	495	495	All	495	NA
Benzo(k)fluoranthene	ug/kg	13	0	495	495	All	495	NA
bis(2-Chloroethoxy)methane	ug/kg	13	0	495	495	All	495	NA
bis(2-Chloroethyl)ether	ug/kg	13	0	495	495	All	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	13	0	495	495	All	495	NA
Butyl Benzyl Phthalate	ug/kg	13	0	495	495	All	495	NA
Carbazole	ug/kg	13	0	495	495	All	495	NA
Chrysene	ug/kg	13	0	495	495	All	495	NA
Dibenzo(a,h)anthracene	ug/kg	13	0	495	495	All	495	NA
Dibenzofuran	ug/kg	13	0	495	495	All	495	NA
Diethyl Phthalate	ug/kg	13	0	495	495	All	495	NA
Dimethyl Phthalate	ug/kg	13	0	495	495	All	495	NA
Di-n-butylphthalate	ug/kg	13	6	88	495	Various	325	NA
Di-n-octylphthalate	ug/kg	13	0	495	495	All	495	NA
Fluoranthene	ug/kg	13	0	495	495	All	495	NA
Fluorene	ug/kg	13	0	495	495	All	495	NA
Hexachlorobenzene	ug/kg	13	0	495	495	All	495	NA
Hexachlorobutadiene	ug/kg	13	0	495	495	All	495	NA
Hexachlorocyclopentadiene	ug/kg	13	0	495	495	All	495	NA
Hexachloroethane	ug/kg	13	0	495	495	All	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	13	0	495	495	All	495	NA
Isophorone	ug/kg	13	0	495	495	All	495	NA
Naphthalene	ug/kg	13	0	495	495	All	495	NA
Nitrobenzene	ug/kg	13	0	495	495	All	495	NA
N-Nitroso-di-n-propylamine	ug/kg	13	0	495	495	All	495	NA
N-Nitrosodiphenylamine	ug/kg	13	0	495	495	All	495	NA
Pentachlorophenol	ug/kg	13	0	26	50		29	NA
Phenanthrene	ug/kg	13	0	495	495	All	495	NA
Phenol	ug/kg	13	1	320	495	All (except PL-Q-10	482	NA
Pyrene	ug/kg	13	0	495	495	All	495	NA

Table III-B3
Calculations for Risk Assessment Modeling
Site Q - Plant Tissue
Sauget, IL

Analyte	Units	Site Q						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	13	0	5.0	5.0	All	5.0	NA
4,4'-DDE	ug/kg	13	1	1.3	5.0	All (except PL-Q-15)	4.7	NA
4,4'-DDT	ug/kg	13	2	2.0	5.0	Various	4.7	NA
Aldrin	ug/kg	13	1	1.0	2.6	All (except PL-Q-14)	2.4	NA
alpha-BHC	ug/kg	13	8	0.62	3.7	PL-Q-17	2.2	NA
alpha-Chlordane	ug/kg	13	2	1.6	2.7	PL-Q-17	2.5	NA
beta-BHC	ug/kg	13	5	2.2	5.9	PL-Q-16	3.3	NA
delta-BHC	ug/kg	13	2	0.29	2.6	Various	2.3	NA
Dieldrin	ug/kg	13	2	1.2	5.0	Various	4.4	NA
Endosulfan I	ug/kg	13	0	2.6	2.6	All	2.6	NA
Endosulfan II	ug/kg	13	1	1.4	5.0	All (except PL-Q-19)	4.7	NA
Endosulfan Sulfate	ug/kg	13	0	5.0	5.0	All	5.0	NA
Endrin	ug/kg	13	1	1.3	5.0	All (except PL-Q-15)	4.7	NA
Endrin Aldehyde	ug/kg	13	0	5.0	5.0	All	5.0	NA
Endrin Ketone	ug/kg	13	0	5.0	5.0	All	5.0	NA
gamma-BHC (Lindane)	ug/kg	13	5	0.25	2.6	Various	1.9	NA
gamma-Chlordane	ug/kg	13	3	0.71	2.9	PL-Q-19	2.4	NA
Heptachlor	ug/kg	13	2	0.73	2.6	Various	2.3	NA
Heptachlor Epoxide	ug/kg	13	1	1.7	2.6	All (except PL-Q-9)	2.5	NA
Methoxychlor	ug/kg	13	1	2.8	26	All (except PL-Q-15)	24	NA
Toxaphene	ug/kg	13	0	255	255	All	255	NA
Herbicides								
2,4-D	ug/kg	13	9	13	160	PL-Q-10	54	NA
2,4-DB	ug/kg	13	7	13	560	PL-Q-18	105	NA
2,4,5-T	ug/kg	13	6	13	440	PL-Q-10	54	NA
2,4,5-TP (Silvex)	ug/kg	13	3	13	40	PL-Q-10	16	NA
Dalapon	ug/kg	13	0	3000	6000	PL-Q-10/PL-Q-18	3462	NA
Dicamba	ug/kg	13	0	30	60	PL-Q-10/PL-Q-18	35	NA
Dichlorprop	ug/kg	13	0	150	300	PL-Q-10/PL-Q-18	173	NA
Dinoseb	ug/kg	13	0	495	495	All	495	NA
MCPA	ug/kg	13	9	3000	14000	PL-Q-18	5700	NA
MCPP	ug/kg	13	3	3000	11000	PL-Q-10/PL-Q-17	4769	NA
PCBs								
Total PCBs	ug/kg	13	0	25	25	All	25	NA
Dioxins/Furans								
TEQ	pg/g	12	12	0.22	0.59	PL-Q-21 Dup of PL-Q-12	0.32	NA
Metals								
Aluminum	mg/kg	13	13	7.3	75	PL-Q-21 Dup of PL-Q-12	27	NA
Antimony	mg/kg	13	0	0.85	1.0	Various	0.96	NA
Arsenic	mg/kg	13	0	0.42	0.50	Various	0.48	NA
Barium	mg/kg	13	13	2.5	32	PL-Q-19	11	NA
Beryllium	mg/kg	13	0	0.17	0.20	Various	0.19	NA
Cadmium	mg/kg	13	12	0.059	0.28	PL-Q-10	0.16	NA
Calcium	mg/kg	13	13	1400	5600	PL-Q-17	2708	NA
Chromium	mg/kg	13	6	0.17	0.83	PL-Q-11	0.42	NA
Cobalt	mg/kg	13	0	0.42	0.50	Various	0.48	NA
Copper	mg/kg	13	13	1.2	8.7	PL-Q-15	3.8	NA
Iron	mg/kg	13	13	26	130	PL-Q-21 Dup of PL-Q-12	58	NA
Lead	mg/kg	13	13	0.39	1.2	PL-Q-16	0.72	NA
Magnesium	mg/kg	13	13	550	1600	PL-Q-9	904	NA
Manganese	mg/kg	13	13	4.6	29	PL-Q-16	13	NA
Mercury	mg/kg	13	13	0.097	1.3	PL-Q-14	0.44	NA
Nickel	mg/kg	13	0	1.7	2.0	Various	1.9	NA
Potassium	mg/kg	13	13	2800	10000	PL-Q-12	6169	NA
Selenium	mg/kg	13	5	0.42	0.67	PL-Q-19	0.52	NA
Silver	mg/kg	13	0	0.42	0.50	Various	0.48	NA
Sodium	mg/kg	13	0	21	25	Various	24	NA
Thallium	mg/kg	13	0	0.42	0.50	Various	0.48	NA
Vanadium	mg/kg	13	0	0.42	0.50	Various	0.48	NA
Zinc	mg/kg	13	13	7.0	42	PL-Q-10	24	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B3
Calculations for Risk Assessment Modeling
Site-Wide - Plant Tissue
Sauget, IL

Analyte	Units	Site-Wide						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	26	0	495	495	All	495	NA
1,2-Dichlorobenzene	ug/kg	26	0	495	495	All	495	NA
1,3-Dichlorobenzene	ug/kg	26	0	495	495	All	495	NA
1,4-Dichlorobenzene	ug/kg	26	0	495	495	All	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	26	0	495	495	All	495	NA
2,4,5-Trichlorophenol	ug/kg	26	0	495	495	All	495	NA
2,4,6-Trichlorophenol	ug/kg	26	0	495	495	All	495	NA
2,4-Dichlorophenol	ug/kg	26	0	495	495	All	495	NA
2,4-Dimethylphenol	ug/kg	13	0	495	495	All	495	NA
2,4-Dinitrophenol	ug/kg	26	0	2550	2550	All	2550	NA
2,4-Dinitrotoluene	ug/kg	26	0	495	495	All	495	NA
2,6-Dinitrotoluene	ug/kg	26	0	495	495	All	495	NA
2-Chloronaphthalene	ug/kg	26	0	495	495	All	495	NA
2-Chlorophenol	ug/kg	26	0	495	495	All	495	NA
2-Methylnaphthalene	ug/kg	26	0	495	495	All	495	NA
2-Methylphenol (o-Cresol)	ug/kg	26	0	495	495	All	495	NA
2-Nitroaniline	ug/kg	26	0	2550	2550	All	2550	NA
2-Nitrophenol	ug/kg	26	0	495	495	All	495	NA
3,3'-Dichlorobenzidine	ug/kg	26	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	26	0	495	495	All	495	NA
3-Nitroaniline	ug/kg	26	0	2550	2550	All	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	26	0	2550	2550	All	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	26	0	495	495	All	495	NA
4-Chloro-3-methylphenol	ug/kg	26	0	495	495	All	495	NA
4-Chloroaniline	ug/kg	26	0	1000	1000	All	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	26	0	495	495	All	495	NA
4-Nitroaniline	ug/kg	26	0	2550	2550	All	2550	NA
4-Nitrophenol	ug/kg	26	0	2550	2550	All	2550	NA
Acenaphthene	ug/kg	26	0	495	495	All	495	NA
Acenaphthylene	ug/kg	26	0	495	495	All	495	NA
Anthracene	ug/kg	26	0	495	495	All	495	NA
Benzo(a)anthracene	ug/kg	26	0	495	495	All	495	NA
Benzo(a)pyrene	ug/kg	26	0	495	495	All	495	NA
Benzo(b)fluoranthene	ug/kg	26	0	495	495	All	495	NA
Benzo(g,h,i)perylene	ug/kg	26	3	80	495	Various	453	499
Benzo(k)fluoranthene	ug/kg	26	0	495	495	All	495	NA
bis(2-Chloroethoxy)methane	ug/kg	26	0	495	495	All	495	NA
bis(2-Chloroethyl)ether	ug/kg	26	0	495	495	All	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	26	1	82	495	All (Except PL-S-1)	479	510
Butyl Benzyl Phthalate	ug/kg	26	0	495	495	All	495	NA
Carbazole	ug/kg	26	0	495	495	All	495	NA
Chrysene	ug/kg	26	0	495	495	All	495	NA
Dibenzo(a,h)anthracene	ug/kg	26	0	495	495	All	495	NA
Dibenzofuran	ug/kg	26	0	495	495	All	495	NA
Diethyl Phthalate	ug/kg	26	0	495	495	All	495	NA
Dimethyl Phthalate	ug/kg	26	0	495	495	All	495	NA
Di-n-butylphthalate	ug/kg	26	7	88	495	Various	394	460
Di-n-octylphthalate	ug/kg	26	0	495	495	All	495	NA
Fluoranthene	ug/kg	26	0	495	495	All	495	NA
Fluorene	ug/kg	26	0	495	495	All	495	NA
Hexachlorobenzene	ug/kg	26	0	495	495	All	495	NA
Hexachlorobutadiene	ug/kg	26	0	495	495	All	495	NA
Hexachlorocyclopentadiene	ug/kg	26	0	495	495	All	495	NA
Hexachloroethane	ug/kg	26	0	495	495	All	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	26	0	495	495	All	495	NA
Isophorone	ug/kg	26	0	495	495	All	495	NA
Naphthalene	ug/kg	26	0	495	495	All	495	NA
Nitrobenzene	ug/kg	26	0	495	495	All	495	NA
N-Nitroso-di-n-propylamine	ug/kg	26	0	495	495	All	495	NA
N-Nitrosodiphenylamine	ug/kg	26	0	495	495	All	495	NA
Pentachlorophenol	ug/kg	26	0	26	130	PL-O-3	31	40
Phenanthrene	ug/kg	26	0	495	495	All	495	NA
Phenol	ug/kg	26	2	320	495	Various	483	499
Pyrene	ug/kg	26	0	495	495	All	495	NA

Table III-B3
Calculations for Risk Assessment Modeling
Site-Wide - Plant Tissue
Sauget, IL

Analyte	Units	Site-Wide						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	26	2	1.1	10	PL-P-1	4.9	5.4
4,4'-DDE	ug/kg	26	3	0.97	10	PL-P-1	5.0	5.7
4,4'-DDT	ug/kg	26	8	1.4	10	PL-P-1	4.3	5.0
Aldrin	ug/kg	26	5	0.50	5.1	PL-O-2	2.4	2.7
alpha-BHC	ug/kg	26	9	0.62	3.7	PL-Q-17	2.3	2.6
alpha-Chlordane	ug/kg	26	3	0.93	5.0	PL-P-1	2.6	2.8
beta-BHC	ug/kg	26	11	1.9	5.9	PL-Q-16	3.3	3.8
delta-BHC	ug/kg	26	3	0.29	2.6	Various	2.4	2.6
Dieldrin	ug/kg	26	8	0.92	10	PL-P-1	4.3	5.0
Endosulfan I	ug/kg	26	0	2.6	5.0	PL-P-1	2.6	2.8
Endosulfan II	ug/kg	26	7	1.4	5.4	PL-O-2	4.4	4.8
Endosulfan Sulfate	ug/kg	26	2	1.4	10	PL-P-1	4.9	5.4
Endrin	ug/kg	26	2	1.3	10	PL-P-1	4.9	5.4
Endrin Aldehyde	ug/kg	26	1	5.0	25	PL-O-2	5.9	7.5
Endrin Ketone	ug/kg	26	2	2.2	10	PL-P-1	4.9	5.4
gamma-BHC (Lindane)	ug/kg	26	13	0.25	9.8	PL-O-2	2.4	3.1
gamma-Chlordane	ug/kg	26	6	0.71	5.7	PL-O-2	2.6	2.9
Heptachlor	ug/kg	26	8	0.73	5.5	PL-P-4	2.6	3.0
Heptachlor Epoxide	ug/kg	26	3	0.52	7.6	PL-P-1	2.6	3.1
Methoxychlor	ug/kg	26	2	2.8	190	PL-P-1	31	44
Toxaphene	ug/kg	26	0	255	500	PL-P-1	264	283
Herbicides								
2,4-D	ug/kg	26	19	13	160	PL-Q-10	49	63
2,4-DB	ug/kg	26	13	13	1300	PL-O-3	118	220
2,4,5-T	ug/kg	26	8	13	440	PL-Q-10	36	69
2,4,5-TP (Silvex)	ug/kg	26	4	13	87	PL-P-4	19	26
Dalapon	ug/kg	26	0	3000	15000	PL-O-3	3692	4632
Dicamba	ug/kg	26	0	30	150	PL-O-3	37	46
Dichlorprop	ug/kg	26	3	150	750	PL-O-3	188	235
Dinoseb	ug/kg	26	0	495	495	All	495	NA
MCPA	ug/kg	26	13	3000	15000	PL-O-3	5135	6376
MCPP	ug/kg	26	4	3000	15000	PL-O-3	4569	5880
PCBs								
Total PCBs	ug/kg	26	0	25	25	All	25	NA
Dioxins/Furans								
TEQ	pg/g	26	25	0.22	4.3	PL-O-1	0.57	0.88
Metals								
Aluminum	mg/kg	26	26	7.3	75	PL-Q-12 Dup	24	30
Antimony	mg/kg	26	1	0.52	1.0	Various	0.93	0.97
Arsenic	mg/kg	26	1	0.41	0.50	Various	0.47	0.49
Barium	mg/kg	26	26	2.5	32	PL-Q-19	9.0	12
Beryllium	mg/kg	26	0	0.17	0.20	Various	0.19	0.19
Cadmium	mg/kg	26	24	0.059	0.55	PL-P-1	0.19	0.23
Calcium	mg/kg	26	26	1200	5600	PL-Q-17	2285	2722
Chromium	mg/kg	26	18	0.17	0.83	PL-Q-11	0.36	0.42
Cobalt	mg/kg	26	1	0.42	1.0	PL-P-1	0.50	0.54
Copper	mg/kg	26	26	1.2	8.7	PL-Q-15	3.8	4.5
Iron	mg/kg	26	26	24	130	PL-Q-12 Dup	55	66
Lead	mg/kg	26	26	0.39	7.6	PL-R-1	1.8	2.5
Magnesium	mg/kg	26	26	480	1600	PL-Q-9	839	934
Manganese	mg/kg	26	26	4.6	29	PL-Q-16	11	13
Mercury	mg/kg	26	26	0.097	2.5	PL-R-4	0.70	0.94
Nickel	mg/kg	26	2	1.7	3.9	PL-P-1	2.0	2.2
Potassium	mg/kg	26	26	2800	10000	PL-Q-12	5554	6246
Selenium	mg/kg	26	7	0.42	12	PL-P-1	0.94	1.8
Silver	mg/kg	26	0	0.42	0.50	Various	0.48	0.49
Sodium	mg/kg	26	1	21	340	PL-P-3	36	60
Thallium	mg/kg	26	0	0.42	0.50	Various	0.48	0.49
Vanadium	mg/kg	26	2	0.25	0.50	Various	0.46	0.48
Zinc	mg/kg	26	26	7.0	79	PL-P-1	28	33

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B4
Calculations for Risk Assessment Modeling
Off-Site Areas - Worm Tissue
Sauget, IL

Analyte	Units	Off-Site Areas						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	3	0	1000	1000	All	1000	NA
1,2-Dichlorobenzene	ug/kg	3	0	1000	1000	All	1000	NA
1,3-Dichlorobenzene	ug/kg	3	0	1000	1000	All	1000	NA
1,4-Dichlorobenzene	ug/kg	3	0	1000	1000	All	1000	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	3	0	1000	1000	All	1000	NA
2,4,5-Trichlorophenol	ug/kg	3	0	1000	1000	All	1000	NA
2,4,6-Trichlorophenol	ug/kg	3	0	1000	1000	All	1000	NA
2,4-Dichlorophenol	ug/kg	3	0	1000	1000	All	1000	NA
2,4-Dimethylphenol	ug/kg	3	0	1000	1000	All	1000	NA
2,4-Dinitrophenol	ug/kg	3	0	5000	5000	All	5000	NA
2,4-Dinitrotoluene	ug/kg	3	0	1000	1000	All	1000	NA
2,6-Dinitrotoluene	ug/kg	3	0	1000	1000	All	1000	NA
2-Chloronaphthalene	ug/kg	3	0	1000	1000	All	1000	NA
2-Chlorophenol	ug/kg	3	0	1000	1000	All	1000	NA
2-Methylnaphthalene	ug/kg	3	0	1000	1000	All	1000	NA
2-Methylphenol (o-Cresol)	ug/kg	3	0	1000	1000	All	1000	NA
2-Nitroaniline	ug/kg	3	0	5000	5000	All	5000	NA
2-Nitrophenol	ug/kg	3	0	1000	1000	All	1000	NA
3,3'-Dichlorobenzidine	ug/kg	3	0	2000	2000	All	2000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	3	0	1000	1000	All	1000	NA
3-Nitroaniline	ug/kg	3	0	5000	5000	All	5000	NA
4,6-Dinitro-2-methylphenol	ug/kg	3	0	5000	5000	All	5000	NA
4-Bromophenyl Phenyl Ether	ug/kg	3	0	1000	1000	All	1000	NA
4-Chloro-3-methylphenol	ug/kg	3	0	1000	1000	All	1000	NA
4-Chloroaniline	ug/kg	3	0	2000	2000	All	2000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	3	0	1000	1000	All	1000	NA
4-Nitroaniline	ug/kg	3	0	5000	5000	All	5000	NA
4-Nitrophenol	ug/kg	3	0	5000	5000	All	5000	NA
Acenaphthene	ug/kg	3	0	1000	1000	All	1000	NA
Acenaphthylene	ug/kg	3	0	1000	1000	All	1000	NA
Anthracene	ug/kg	3	0	1000	1000	All	1000	NA
Benzo(a)anthracene	ug/kg	3	0	1000	1000	All	1000	NA
Benzo(a)pyrene	ug/kg	3	0	1000	1000	All	1000	NA
Benzo(b)fluoranthene	ug/kg	3	0	1000	1000	All	1000	NA
Benzo(g,h,i)perylene	ug/kg	3	0	1000	1000	All	1000	NA
Benzo(k)fluoranthene	ug/kg	3	0	1000	1000	All	1000	NA
bis(2-Chloroethoxy)methane	ug/kg	3	0	1000	1000	All	1000	NA
bis(2-Chloroethyl)ether	ug/kg	3	0	1000	1000	All	1000	NA
bis(2-Ethylhexyl)phthalate	ug/kg	3	0	1000	1000	All	1000	NA
Butyl Benzyl Phthalate	ug/kg	3	0	1000	1000	All	1000	NA
Carbazole	ug/kg	3	0	1000	1000	All	1000	NA
Chrysene	ug/kg	3	0	1000	1000	All	1000	NA
Dibenzo(a,h)anthracene	ug/kg	3	0	1000	1000	All	1000	NA
Dibenzofuran	ug/kg	3	0	1000	1000	All	1000	NA
Diethyl Phthalate	ug/kg	3	0	1000	1000	All	1000	NA
Dimethyl Phthalate	ug/kg	3	0	1000	1000	All	1000	NA
Di-n-butylphthalate	ug/kg	3	1	300	1000	#14/#15	767	NA
Di-n-octylphthalate	ug/kg	3	0	1000	1000	All	1000	NA
Fluoranthene	ug/kg	3	0	1000	1000	All	1000	NA
Fluorene	ug/kg	3	0	1000	1000	All	1000	NA
Hexachlorobenzene	ug/kg	3	0	1000	1000	All	1000	NA
Hexachlorobutadiene	ug/kg	3	0	1000	1000	All	1000	NA
Hexachlorocyclopentadiene	ug/kg	3	0	1000	1000	All	1000	NA
Hexachloroethane	ug/kg	3	0	1000	1000	All	1000	NA
Indeno(1,2,3-cd)pyrene	ug/kg	3	0	1000	1000	All	1000	NA
Isophorone	ug/kg	3	0	1000	1000	All	1000	NA
Naphthalene	ug/kg	3	0	1000	1000	All	1000	NA
Nitrobenzene	ug/kg	3	0	1000	1000	All	1000	NA
N-Nitroso-di-n-propylamine	ug/kg	3	0	1000	1000	All	1000	NA
N-Nitrosodiphenylamine	ug/kg	3	0	1000	1000	All	1000	NA
Pentachlorophenol	ug/kg	3	2	7.6	100	#15	40	NA
Phenanthrene	ug/kg	3	0	1000	1000	All	1000	NA
Phenol	ug/kg	3	0	1000	1000	All	1000	NA
Pyrene	ug/kg	3	0	1000	1000	All	1000	NA

Table III-B4
Calculations for Risk Assessment Modeling
Off-Site Areas - Worm Tissue
Sauget, IL

Analyte	Units	Off-Site Areas						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	3	0	20	20	All	20	NA
4,4'-DDE	ug/kg	3	2	8.6	21	#22	17	NA
4,4'-DDT	ug/kg	3	2	20	58	#22	36	NA
Aldrin	ug/kg	3	0	10	10	All	10	NA
alpha-BHC	ug/kg	3	0	10	10	All	10	NA
alpha-Chlordane	ug/kg	3	0	10	10	All	10	NA
beta-BHC	ug/kg	3	0	10	10	All	10	NA
delta-BHC	ug/kg	3	1	2.3	10	#22/#14	7.4	NA
Dieldrin	ug/kg	3	1	5.2	20	#14/#15	15	NA
Endosulfan I	ug/kg	3	1	1.9	10	#22/#15	7.3	NA
Endosulfan II	ug/kg	3	0	20	20	All	20	NA
Endosulfan Sulfate	ug/kg	3	0	20	20	All	20	NA
Endrin	ug/kg	3	0	20	20	All	20	NA
Endrin Aldehyde	ug/kg	3	1	4.2	20	#22/#14	15	NA
Endrin Ketone	ug/kg	3	0	20	20	All	20	NA
gamma-BHC (Lindane)	ug/kg	3	0	10	10	All	10	NA
gamma-Chlordane	ug/kg	3	3	4.4	5.1	#14	4.8	NA
Heptachlor	ug/kg	3	0	10	10	All	10	NA
Heptachlor Epoxide	ug/kg	3	0	10	10	All	10	NA
Methoxychlor	ug/kg	3	1	17	100	#14/#15	72	NA
Toxaphene	ug/kg	3	0	1000	1000	All	1000	NA
Herbicides								
2,4-D	ug/kg	3	0	25	50	#15	33	NA
2,4-DB	ug/kg	3	0	25	50	#15	33	NA
2,4,5-T	ug/kg	3	1	25	50	#15	34	NA
2,4,5-TP (Silvex)	ug/kg	3	1	9.4	50	#15	28	NA
Dalapon	ug/kg	3	0	6000	12000	#15	8000	NA
Dicamba	ug/kg	3	0	60	120	#15	80	NA
Dichlorprop	ug/kg	3	0	300	600	#15	400	NA
Dinoseb	ug/kg	3	0	1000	1000	All	1000	NA
MCPA	ug/kg	3	3	27000	74000	#14	47333	NA
MCPP	ug/kg	3	0	6000	12000	#15	8000	NA
PCBs								
Total PCBs	ug/kg	3	1	22	50	#22/#15	41	NA
Dioxins/Furans								
TEQ	pg/g	3	3	3.7	6.7	#22	4.8	NA
Metals								
Aluminum	mg/kg	3	3	220	1200	#22	613	NA
Antimony	mg/kg	3	1	0.42	1.0	#15	0.77	NA
Arsenic	mg/kg	3	3	5.5	5.9	#22	5.8	NA
Barium	mg/kg	3	3	8.3	33	#22	18	NA
Beryllium	mg/kg	3	0	0.18	0.20	#22/#15	0.19	NA
Cadmium	mg/kg	3	3	0.89	2.1	#22	1.5	NA
Calcium	mg/kg	3	3	910	960	#14	937	NA
Chromium	mg/kg	3	2	0.50	2.3	#22	1.2	NA
Cobalt	mg/kg	3	3	1.3	1.9	#22	1.6	NA
Copper	mg/kg	3	3	2.0	30	#22	13	NA
Iron	mg/kg	3	3	490	2300	#22	1297	NA
Lead	mg/kg	3	3	2.5	23	#22	10	NA
Magnesium	mg/kg	3	3	300	480	#22	380	NA
Manganese	mg/kg	3	3	13	60	#22	34	NA
Mercury	mg/kg	3	3	0.030	0.096	#22	0.058	NA
Nickel	mg/kg	3	2	1.5	4.7	#22	2.7	NA
Potassium	mg/kg	3	3	1200	1400	#22	1267	NA
Selenium	mg/kg	3	1	0.50	0.53	#14	0.51	NA
Silver	mg/kg	3	1	0.27	0.50	#15	0.41	NA
Sodium	mg/kg	3	3	570	620	#15	600	NA
Thallium	mg/kg	3	0	0.46	0.50	#22/#15	0.49	NA
Vanadium	mg/kg	3	3	0.75	3.9	#22	2.1	NA
Zinc	mg/kg	3	3	18	86	#22	52	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B4
Calculations for Risk Assessment Modeling
Site P - Worm Tissue
Sauget, IL

Analyte	Units	Site P						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	4	0	495	1000	#6/#24	748	NA
1,2-Dichlorobenzene	ug/kg	4	0	495	1000	#6/#24	748	NA
1,3-Dichlorobenzene	ug/kg	4	0	495	1000	#6/#24	748	NA
1,4-Dichlorobenzene	ug/kg	4	0	495	1000	#6/#24	748	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	4	0	495	1000	#6/#24	748	NA
2,4,5-Trichlorophenol	ug/kg	4	0	495	1000	#6/#24	748	NA
2,4,6-Trichlorophenol	ug/kg	4	0	495	1000	#6/#24	748	NA
2,4-Dichlorophenol	ug/kg	4	0	495	1000	#6/#24	748	NA
2,4-Dimethylphenol	ug/kg	4	0	495	1000	#6/#24	748	NA
2,4-Dinitrophenol	ug/kg	4	0	2550	5000	#6/#24	3775	NA
2,4-Dinitrotoluene	ug/kg	4	0	495	1000	#6/#24	748	NA
2,6-Dinitrotoluene	ug/kg	4	0	495	1000	#6/#24	748	NA
2-Chloronaphthalene	ug/kg	4	0	495	1000	#6/#24	748	NA
2-Chlorophenol	ug/kg	4	0	495	1000	#6/#24	748	NA
2-Methylnaphthalene	ug/kg	4	0	495	1000	#6/#24	748	NA
2-Methylphenol (o-Cresol)	ug/kg	4	0	495	1000	#6/#24	748	NA
2-Nitroaniline	ug/kg	4	0	2550	5000	#6/#24	3775	NA
2-Nitrophenol	ug/kg	4	0	495	1000	#6/#24	748	NA
3,3'-Dichlorobenzidine	ug/kg	4	0	1000	2000	#6/#24	1500	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	4	0	495	1000	#6/#24	748	NA
3-Nitroaniline	ug/kg	4	0	2550	5000	#6/#24	3775	NA
4,6-Dinitro-2-methylphenol	ug/kg	4	0	2550	5000	#6/#24	3775	NA
4-Bromophenyl Phenyl Ether	ug/kg	4	0	495	1000	#6/#24	748	NA
4-Chloro-3-methylphenol	ug/kg	4	0	495	1000	#6/#24	748	NA
4-Chloroaniline	ug/kg	4	0	1000	2000	#6/#24	1500	NA
4-Chlorophenyl Phenyl Ether	ug/kg	4	0	495	1000	#6/#24	748	NA
4-Nitroaniline	ug/kg	4	0	2550	5000	#6/#24	3775	NA
4-Nitrophenol	ug/kg	4	0	2550	5000	#6/#24	3775	NA
Acenaphthene	ug/kg	4	0	495	1000	#6/#24	748	NA
Acenaphthylene	ug/kg	4	0	495	1000	#6/#24	748	NA
Anthracene	ug/kg	4	0	495	1000	#6/#24	748	NA
Benzo(a)anthracene	ug/kg	4	0	495	1000	#6/#24	748	NA
Benzo(a)pyrene	ug/kg	4	1	230	1000	#6/#24	681	NA
Benzo(b)fluoranthene	ug/kg	4	1	230	1000	#6/#24	681	NA
Benzo(g,h,i)perylene	ug/kg	4	0	495	1000	#6/#24	748	NA
Benzo(k)fluoranthene	ug/kg	4	1	240	1000	#6/#24	684	NA
bis(2-Chloroethoxy)methane	ug/kg	4	0	495	1000	#6/#24	748	NA
bis(2-Chloroethyl)ether	ug/kg	4	0	495	1000	#6/#24	748	NA
bis(2-Ethylhexyl)phthalate	ug/kg	4	0	495	1000	#6/#24	748	NA
Butyl Benzyl Phthalate	ug/kg	4	0	495	1000	#6/#24	748	NA
Carbazole	ug/kg	4	0	495	1000	#6/#24	748	NA
Chrysene	ug/kg	4	1	120	1000	#6/#24	654	NA
Dibenzo(a,h)anthracene	ug/kg	4	0	495	1000	#6/#24	748	NA
Dibenzofuran	ug/kg	4	0	495	1000	#6/#24	748	NA
Diethyl Phthalate	ug/kg	4	0	495	1000	#6/#24	748	NA
Dimethyl Phthalate	ug/kg	4	0	495	1000	#6/#24	748	NA
Di-n-butylphthalate	ug/kg	4	0	495	1000	#6/#24	748	NA
Di-n-octylphthalate	ug/kg	4	0	495	1000	#6/#24	748	NA
Fluoranthene	ug/kg	4	0	495	1000	#6/#24	748	NA
Fluorene	ug/kg	4	0	495	1000	#6/#24	748	NA
Hexachlorobenzene	ug/kg	4	0	495	1000	#6/#24	748	NA
Hexachlorobutadiene	ug/kg	4	0	495	1000	#6/#24	748	NA
Hexachlorocyclopentadiene	ug/kg	4	0	495	1000	#6/#24	748	NA
Hexachloroethane	ug/kg	4	0	495	1000	#6/#24	748	NA
Indeno(1,2,3-cd)pyrene	ug/kg	4	0	495	1000	#6/#24	748	NA
Isophorone	ug/kg	4	0	495	1000	#6/#24	748	NA
Naphthalene	ug/kg	4	0	495	1000	#6/#24	748	NA
Nitrobenzene	ug/kg	4	0	495	1000	#6/#24	748	NA
N-Nitroso-di-n-propylamine	ug/kg	4	0	495	1000	#6/#24	748	NA
N-Nitrosodiphenylamine	ug/kg	4	0	495	1000	#6/#24	748	NA
Pentachlorophenol	ug/kg	4	3	11	50	#7	22	NA
Phenanthrene	ug/kg	4	0	495	1000	#6/#24	748	NA
Phenol	ug/kg	4	0	495	1000	#6/#24	748	NA
Pyrene	ug/kg	4	0	495	1000	#6/#24	748	NA

Table III-B4
Calculations for Risk Assessment Modeling
Site P - Worm Tissue
Sauget, IL

Analyte	Units	Site P						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	4	0	10	20	#6/#24	15	NA
4,4'-DDE	ug/kg	4	1	3.5	20	#24	11	NA
4,4'-DDT	ug/kg	4	3	4.2	220	#24	62	NA
Aldrin	ug/kg	4	0	5.0	10	#6/#24	7.5	NA
alpha-BHC	ug/kg	4	0	5.0	10	#6/#24	7.5	NA
alpha-Chlordane	ug/kg	4	0	5.0	10	#6/#24	7.5	NA
beta-BHC	ug/kg	4	0	5.0	10	#6/#24	7.5	NA
delta-BHC	ug/kg	4	3	4.1	10	#24	5.8	NA
Dieldrin	ug/kg	4	3	2.1	65	#24	21	NA
Endosulfan I	ug/kg	4	0	5.0	10	#6/#24	7.5	NA
Endosulfan II	ug/kg	4	0	10	20	#6/#24	15	NA
Endosulfan Sulfate	ug/kg	4	2	4.2	20	#24	11	NA
Endrin	ug/kg	4	1	10	20	#6/#24	17	NA
Endrin Aldehyde	ug/kg	4	0	10	20	#6/#24	15	NA
Endrin Ketone	ug/kg	4	1	8.0	20	#6	12	NA
gamma-BHC (Lindane)	ug/kg	4	0	5.0	10	#6/#24	7.5	NA
gamma-Chlordane	ug/kg	4	0	5.0	10	#6/#24	7.5	NA
Heptachlor	ug/kg	4	1	5.0	10	#6	6.4	NA
Heptachlor Epoxide	ug/kg	4	1	5.0	10	#24	7.0	NA
Methoxychlor	ug/kg	4	4	10	50	#6	23	NA
Toxaphene	ug/kg	4	0	500	1000	#6/#24	750	NA
Herbicides								
2,4-D	ug/kg	4	2	25	630	#6	208	NA
2,4-DB	ug/kg	4	0	25	25	All	25	NA
2,4,5-T	ug/kg	4	0	25	25	All	25	NA
2,4,5-TP (Silvex)	ug/kg	4	0	25	25	All	25	NA
Dalapon	ug/kg	4	0	6000	6000	All	6000	NA
Dicamba	ug/kg	4	0	60	60	All	60	NA
Dichlorprop	ug/kg	4	1	120	300	All (except #24)	255	NA
Dinoseb	ug/kg	4	0	495	1000	#6/#24	748	NA
MCPA	ug/kg	4	4	29000	90000	#6	59250	NA
MCPP	ug/kg	4	0	6000	6000	All	6000	NA
PCBs								
Total PCBs	ug/kg	4	2	9.0	170	#24	64	NA
Dioxins/Furans								
TEQ	pg/g	4	4	1.4	44	#6	13	NA
Metals								
Aluminum	mg/kg	4	4	510	1600	#2	863	NA
Antimony	mg/kg	4	2	0.47	1.0	#24	0.72	NA
Arsenic	mg/kg	4	4	4.9	12	#7	8.6	NA
Barium	mg/kg	4	4	10	33	#2	19	NA
Beryllium	mg/kg	4	2	0.18	0.47	#2	0.29	NA
Cadmium	mg/kg	4	4	1.2	1.4	#6/#7	1.3	NA
Calcium	mg/kg	4	4	1100	2800	#2	2000	NA
Chromium	mg/kg	4	4	1.6	11	#2	4.1	NA
Cobalt	mg/kg	4	4	1.8	5.9	#2	3.3	NA
Copper	mg/kg	4	4	5.6	14	#2	10	NA
Iron	mg/kg	4	4	830	6800	#2	2583	NA
Lead	mg/kg	4	4	8.5	15	#2	12	NA
Magnesium	mg/kg	4	4	170	940	#24	473	NA
Manganese	mg/kg	4	4	7.8	91	#2	45	NA
Mercury	mg/kg	4	4	0.017	0.071	#24	0.046	NA
Nickel	mg/kg	4	4	1.6	18	#2	7.1	NA
Potassium	mg/kg	4	4	1100	1300	#24	1200	NA
Selenium	mg/kg	4	3	0.50	2.2	#2	1.0	NA
Silver	mg/kg	4	0	0.46	0.50	All (except #6)	0.49	NA
Sodium	mg/kg	4	4	530	600	#6	578	NA
Thallium	mg/kg	4	0	0.46	0.50	All (except #6)	0.49	NA
Vanadium	mg/kg	4	4	2.7	18	#2	7.2	NA
Zinc	mg/kg	4	4	40	98	#7	73	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B4
Calculations for Risk Assessment Modeling
Site R - Worm Tissue
Sauget, IL

Analyte	Units	Site R						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	5	0	1000	1000	All	1000	NA
1,2-Dichlorobenzene	ug/kg	5	0	1000	1000	All	1000	NA
1,3-Dichlorobenzene	ug/kg	5	0	1000	1000	All	1000	NA
1,4-Dichlorobenzene	ug/kg	5	0	1000	1000	All	1000	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	5	0	1000	1000	All	1000	NA
2,4,5-Trichlorophenol	ug/kg	5	0	1000	1000	All	1000	NA
2,4,6-Trichlorophenol	ug/kg	5	0	1000	1000	All	1000	NA
2,4-Dichlorophenol	ug/kg	5	0	1000	1000	All	1000	NA
2,4-Dimethylphenol	ug/kg	5	0	1000	1000	All	1000	NA
2,4-Dinitrophenol	ug/kg	5	0	5000	5000	All	5000	NA
2,4-Dinitrotoluene	ug/kg	5	0	1000	1000	All	1000	NA
2,6-Dinitrotoluene	ug/kg	5	0	1000	1000	All	1000	NA
2-Chloronaphthalene	ug/kg	5	0	1000	1000	All	1000	NA
2-Chlorophenol	ug/kg	5	0	1000	1000	All	1000	NA
2-Methylnaphthalene	ug/kg	5	0	1000	1000	All	1000	NA
2-Methylphenol (o-Cresol)	ug/kg	5	0	1000	1000	All	1000	NA
2-Nitroaniline	ug/kg	5	0	5000	5000	All	5000	NA
2-Nitrophenol	ug/kg	5	0	1000	1000	All	1000	NA
3,3'-Dichlorobenzidine	ug/kg	5	0	2000	2000	All	2000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	5	0	1000	1000	All	1000	NA
3-Nitroaniline	ug/kg	5	0	5000	5000	All	5000	NA
4,6-Dinitro-2-methylphenol	ug/kg	5	0	5000	5000	All	5000	NA
4-Bromophenyl Phenyl Ether	ug/kg	5	0	1000	1000	All	1000	NA
4-Chloro-3-methylphenol	ug/kg	5	0	1000	1000	All	1000	NA
4-Chloroaniline	ug/kg	5	0	2000	2000	All	2000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	5	0	1000	1000	All	1000	NA
4-Nitroaniline	ug/kg	5	0	5000	5000	All	5000	NA
4-Nitrophenol	ug/kg	5	0	5000	5000	All	5000	NA
Acenaphthene	ug/kg	5	0	1000	1000	All	1000	NA
Acenaphthylene	ug/kg	5	0	1000	1000	All	1000	NA
Anthracene	ug/kg	5	0	1000	1000	All	1000	NA
Benzo(a)anthracene	ug/kg	5	0	1000	1000	All	1000	NA
Benzo(a)pyrene	ug/kg	5	0	1000	1000	All	1000	NA
Benzo(b)fluoranthene	ug/kg	5	0	1000	1000	All	1000	NA
Benzo(g,h,i)perylene	ug/kg	5	0	1000	1000	All	1000	NA
Benzo(k)fluoranthene	ug/kg	5	0	1000	1000	All	1000	NA
bis(2-Chloroethoxy)methane	ug/kg	5	0	1000	1000	All	1000	NA
bis(2-Chloroethyl)ether	ug/kg	5	0	1000	1000	All	1000	NA
bis(2-Ethylhexyl)phthalate	ug/kg	5	0	1000	1000	All	1000	NA
Butyl Benzyl Phthalate	ug/kg	5	0	1000	1000	All	1000	NA
Carbazole	ug/kg	5	0	1000	1000	All	1000	NA
Chrysene	ug/kg	5	0	1000	1000	All	1000	NA
Dibenzo(a,h)anthracene	ug/kg	5	0	1000	1000	All	1000	NA
Dibenzofuran	ug/kg	5	0	1000	1000	All	1000	NA
Diethyl Phthalate	ug/kg	5	0	1000	1000	All	1000	NA
Dimethyl Phthalate	ug/kg	5	0	1000	1000	All	1000	NA
Di-n-butylphthalate	ug/kg	5	0	1000	1000	All	1000	NA
Di-n-octylphthalate	ug/kg	5	0	1000	1000	All	1000	NA
Fluoranthene	ug/kg	5	0	1000	1000	All	1000	NA
Fluorene	ug/kg	5	0	1000	1000	All	1000	NA
Hexachlorobenzene	ug/kg	5	0	1000	1000	All	1000	NA
Hexachlorobutadiene	ug/kg	5	0	1000	1000	All	1000	NA
Hexachlorocyclopentadiene	ug/kg	5	0	1000	1000	All	1000	NA
Hexachloroethane	ug/kg	5	0	1000	1000	All	1000	NA
Indeno(1,2,3-cd)pyrene	ug/kg	5	0	1000	1000	All	1000	NA
Isophorone	ug/kg	5	0	1000	1000	All	1000	NA
Naphthalene	ug/kg	5	0	1000	1000	All	1000	NA
Nitrobenzene	ug/kg	5	0	1000	1000	All	1000	NA
N-Nitroso-di-n-propylamine	ug/kg	5	0	1000	1000	All	1000	NA
N-Nitrosodiphenylamine	ug/kg	5	0	1000	1000	All	1000	NA
Pentachlorophenol	ug/kg	5	1	8.8	100	All (except #12)	82	NA
Phenanthrene	ug/kg	5	0	1000	1000	All	1000	NA
Phenol	ug/kg	5	0	1000	1000	All	1000	NA
Pyrene	ug/kg	5	0	1000	1000	All	1000	NA

Table III-B4
Calculations for Risk Assessment Modeling
Site R - Worm Tissue
Sauget, IL

Analyte	Units	Site R						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	5	0	20	20	All	20	NA
4,4'-DDE	ug/kg	5	0	20	20	All	20	NA
4,4'-DDT	ug/kg	5	3	6.8	20	#19/#12	14	NA
Aldrin	ug/kg	5	1	2.6	10	All (except #4)	8.5	NA
alpha-BHC	ug/kg	5	1	10	10	All	10	NA
alpha-Chlordane	ug/kg	5	0	10	10	All	10	NA
beta-BHC	ug/kg	5	0	10	10	All	10	NA
delta-BHC	ug/kg	5	3	6.5	17	#16	11	NA
Dieldrin	ug/kg	5	2	2.9	20	Various	14	NA
Endosulfan I	ug/kg	5	0	10	10	All	10	NA
Endosulfan II	ug/kg	5	0	20	20	All	20	NA
Endosulfan Sulfate	ug/kg	5	2	6.1	20	Various	15	NA
Endrin	ug/kg	5	0	20	20	All	20	NA
Endrin Aldehyde	ug/kg	5	1	4.4	20	All (except #16)	17	NA
Endrin Ketone	ug/kg	5	1	20	31	#4	22	NA
gamma-BHC (Lindane)	ug/kg	5	0	10	10	All	10	NA
gamma-Chlordane	ug/kg	5	1	4.2	10	All (except #4)	8.8	NA
Heptachlor	ug/kg	5	1	8.3	10	All (except #16)	9.7	NA
Heptachlor Epoxide	ug/kg	5	0	10	10	All	10	NA
Methoxychlor	ug/kg	5	3	7.8	100	#16/#12	47	NA
Toxaphene	ug/kg	5	0	1000	1000	All	1000	NA
Herbicides								
2,4-D	ug/kg	5	1	50	110	#19	62	NA
2,4-DB	ug/kg	5	0	50	50	All	50	NA
2,4,5-T	ug/kg	5	0	50	50	All	50	NA
2,4,5-TP (Silvex)	ug/kg	5	0	50	50	All	50	NA
Dalapon	ug/kg	5	0	12000	12000	All	12000	NA
Dicamba	ug/kg	5	0	120	120	All	120	NA
Dichlorprop	ug/kg	5	0	600	600	All	600	NA
Dinoseb	ug/kg	5	0	1000	1000	All	1000	NA
MCPA	ug/kg	5	5	20000	42000	#12	29000	NA
MCPP	ug/kg	5	0	12000	12000	All	12000	NA
PCBs								
Total PCBs	ug/kg	5	0	50	50	All	50	NA
Dioxins/Furans								
TEQ	pg/g	5	5	0.68	1.5	#19	1.1	NA
Metals								
Aluminum	mg/kg	5	5	410	710	#12	532	NA
Antimony	mg/kg	5	0	0.90	1.0	#16/#12	0.94	NA
Arsenic	mg/kg	5	5	4.3	5.6	#16/#4	5.2	NA
Barium	mg/kg	5	5	5.3	8.3	#17	6.8	NA
Beryllium	mg/kg	5	0	0.18	0.20	#16/#12	0.19	NA
Cadmium	mg/kg	5	5	0.67	1.1	#12	0.88	NA
Calcium	mg/kg	5	5	670	790	#12	722	NA
Chromium	mg/kg	5	3	0.46	1.3	#12	0.85	NA
Cobalt	mg/kg	5	5	1.2	1.5	Various	1.4	NA
Copper	mg/kg	5	5	2.7	3.7	#12	3.1	NA
Iron	mg/kg	5	5	740	1300	#12	960	NA
Lead	mg/kg	5	5	0.76	2.4	#19	1.4	NA
Magnesium	mg/kg	5	5	280	410	#12	348	NA
Manganese	mg/kg	5	5	26	37	#17	32	NA
Mercury	mg/kg	5	5	0.023	0.030	Various	0.026	NA
Nickel	mg/kg	5	2	1.3	2.0	#16	1.7	NA
Potassium	mg/kg	5	5	1000	1400	#16	1240	NA
Selenium	mg/kg	5	3	0.46	0.70	#12	0.51	NA
Silver	mg/kg	5	0	0.46	0.50	#16/#12	0.47	NA
Sodium	mg/kg	5	5	550	700	#16	634	NA
Thallium	mg/kg	5	0	0.46	0.50	#16/#12	0.47	NA
Vanadium	mg/kg	5	5	1.3	2.3	#12	1.7	NA
Zinc	mg/kg	5	5	20	29	#12	23	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B4
Calculations for Risk Assessment Modeling
Site O - Worm Tissue
Sauget, IL

Analyte	Units	Site O						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	3	0	1000	1000	All	1000	NA
1,2-Dichlorobenzene	ug/kg	3	0	1000	1000	All	1000	NA
1,3-Dichlorobenzene	ug/kg	3	0	1000	1000	All	1000	NA
1,4-Dichlorobenzene	ug/kg	3	0	1000	1000	All	1000	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	3	0	1000	1000	All	1000	NA
2,4,5-Trichlorophenol	ug/kg	3	0	1000	1000	All	1000	NA
2,4,6-Trichlorophenol	ug/kg	3	0	1000	1000	All	1000	NA
2,4-Dichlorophenol	ug/kg	3	0	1000	1000	All	1000	NA
2,4-Dimethylphenol	ug/kg	3	0	1000	1000	All	1000	NA
2,4-Dinitrophenol	ug/kg	3	0	5000	5000	All	5000	NA
2,4-Dinitrotoluene	ug/kg	3	0	1000	1000	All	1000	NA
2,6-Dinitrotoluene	ug/kg	3	0	1000	1000	All	1000	NA
2-Chloronaphthalene	ug/kg	3	0	1000	1000	All	1000	NA
2-Chlorophenol	ug/kg	3	0	1000	1000	All	1000	NA
2-Methylnaphthalene	ug/kg	3	0	1000	1000	All	1000	NA
2-Methylphenol (o-Cresol)	ug/kg	3	0	1000	1000	All	1000	NA
2-Nitroaniline	ug/kg	3	0	5000	5000	All	5000	NA
2-Nitrophenol	ug/kg	3	0	1000	1000	All	1000	NA
3,3'-Dichlorobenzidine	ug/kg	3	0	2000	2000	All	2000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	3	0	1000	1000	All	1000	NA
3-Nitroaniline	ug/kg	3	0	5000	5000	All	5000	NA
4,6-Dinitro-2-methylphenol	ug/kg	3	0	5000	5000	All	5000	NA
4-Bromophenyl Phenyl Ether	ug/kg	3	0	1000	1000	All	1000	NA
4-Chloro-3-methylphenol	ug/kg	3	0	1000	1000	All	1000	NA
4-Chloroaniline	ug/kg	3	0	2000	2000	All	2000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	3	0	1000	1000	All	1000	NA
4-Nitroaniline	ug/kg	3	0	5000	5000	All	5000	NA
4-Nitrophenol	ug/kg	3	0	5000	5000	All	5000	NA
Acenaphthene	ug/kg	3	0	1000	1000	All	1000	NA
Acenaphthylene	ug/kg	3	0	1000	1000	All	1000	NA
Anthracene	ug/kg	3	0	1000	1000	All	1000	NA
Benzo(a)anthracene	ug/kg	3	0	1000	1000	All	1000	NA
Benzo(a)pyrene	ug/kg	3	0	1000	1000	All	1000	NA
Benzo(b)fluoranthene	ug/kg	3	0	1000	1000	All	1000	NA
Benzo(g,h,i)perylene	ug/kg	3	0	1000	1000	All	1000	NA
Benzo(k)fluoranthene	ug/kg	3	0	1000	1000	All	1000	NA
bis(2-Chloroethoxy)methane	ug/kg	3	0	1000	1000	All	1000	NA
bis(2-Chloroethyl)ether	ug/kg	3	0	1000	1000	All	1000	NA
bis(2-Ethylhexyl)phthalate	ug/kg	3	0	1000	1000	All	1000	NA
Butyl Benzyl Phthalate	ug/kg	3	0	1000	1000	All	1000	NA
Carbazole	ug/kg	3	0	1000	1000	All	1000	NA
Chrysene	ug/kg	3	0	1000	1000	All	1000	NA
Dibenzo(a,h)anthracene	ug/kg	3	0	1000	1000	All	1000	NA
Dibenzofuran	ug/kg	3	0	1000	1000	All	1000	NA
Diethyl Phthalate	ug/kg	3	0	1000	1000	All	1000	NA
Dimethyl Phthalate	ug/kg	3	0	1000	1000	All	1000	NA
Di-n-butylphthalate	ug/kg	3	0	1000	1000	All	1000	NA
Di-n-octylphthalate	ug/kg	3	0	1000	1000	All	1000	NA
Fluoranthene	ug/kg	3	0	1000	1000	All	1000	NA
Fluorene	ug/kg	3	0	1000	1000	All	1000	NA
Hexachlorobenzene	ug/kg	3	0	1000	1000	All	1000	NA
Hexachlorobutadiene	ug/kg	3	0	1000	1000	All	1000	NA
Hexachlorocyclopentadiene	ug/kg	3	0	1000	1000	All	1000	NA
Hexachloroethane	ug/kg	3	0	1000	1000	All	1000	NA
Indeno(1,2,3-cd)pyrene	ug/kg	3	0	1000	1000	All	1000	NA
Isophorone	ug/kg	3	0	1000	1000	All	1000	NA
Naphthalene	ug/kg	3	0	1000	1000	All	1000	NA
Nitrobenzene	ug/kg	3	0	1000	1000	All	1000	NA
N-Nitroso-di-n-propylamine	ug/kg	3	0	1000	1000	All	1000	NA
N-Nitrosodiphenylamine	ug/kg	3	0	1000	1000	All	1000	NA
Pentachlorophenol	ug/kg	3	3	48	1400	#8	539	NA
Phenanthrene	ug/kg	3	0	1000	1000	All	1000	NA
Phenol	ug/kg	3	0	1000	1000	All	1000	NA
Pyrene	ug/kg	3	0	1000	1000	All	1000	NA

Table III-B4
Calculations for Risk Assessment Modeling
Site O - Worm Tissue
Sauget, IL

Analyte	Units	Site O						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	3	1	20	140	#8	60	NA
4,4'-DDE	ug/kg	3	0	20	20	All	20	NA
4,4'-DDT	ug/kg	3	3	26	1200	#8	615	NA
Aldrin	ug/kg	3	2	5.9	21	#8	12	NA
alpha-BHC	ug/kg	3	0	10	10	All	10	NA
alpha-Chlordane	ug/kg	3	0	10	10	All	10	NA
beta-BHC	ug/kg	3	0	10	10	All	10	NA
delta-BHC	ug/kg	3	1	10	51	#8	24	NA
Dieldrin	ug/kg	3	3	26	400	#18	179	NA
Endosulfan I	ug/kg	3	1	1.9	10	#8/#10	7.3	NA
Endosulfan II	ug/kg	3	1	20	39	#8	26	NA
Endosulfan Sulfate	ug/kg	3	1	18	20	#8/#18	19	NA
Endrin	ug/kg	3	1	20	58	#10	33	NA
Endrin Aldehyde	ug/kg	3	0	20	20	All	20	NA
Endrin Ketone	ug/kg	3	0	20	20	All	20	NA
gamma-BHC (Lindane)	ug/kg	3	1	10	18	#8	13	NA
gamma-Chlordane	ug/kg	3	0	10	10	All	10	NA
Heptachlor	ug/kg	3	0	10	10	All	10	NA
Heptachlor Epoxide	ug/kg	3	0	10	10	All	10	NA
Methoxychlor	ug/kg	3	0	100	100	All	100	NA
Toxaphene	ug/kg	3	0	1000	1000	All	1000	NA
Herbicides								
2,4-D	ug/kg	3	2	25	94	#8	58	NA
2,4-DB	ug/kg	3	0	12.5	50	#8	29	NA
2,4,5-T	ug/kg	3	1	7.6	50	#8	28	NA
2,4,5-TP (Silvex)	ug/kg	3	1	6.1	50	#8	27	NA
Dalapon	ug/kg	3	0	3000	12000	#8	7000	NA
Dicamba	ug/kg	3	0	30	120	#8	70	NA
Dichlorprop	ug/kg	3	0	150	600	#8	350	NA
Dinoseb	ug/kg	3	0	1000	1000	All	1000	NA
MCPA	ug/kg	3	2	3000	58000	#10	33667	NA
MCPP	ug/kg	3	0	3000	12000	#8	7000	NA
PCBs								
Total PCBs	ug/kg	3	3	562	32614	#8	20732	NA
Dioxins/Furans								
TEQ	pg/g	3	3	37	2565	#8	1192	NA
Metals								
Aluminum	mg/kg	3	3	520	960	#18	777	NA
Antimony	mg/kg	3	0	1.0	1.0	All	1.0	NA
Arsenic	mg/kg	3	3	5.0	6.3	#18	5.6	NA
Barium	mg/kg	3	3	8.3	16	#18	12	NA
Beryllium	mg/kg	3	0	0.20	0.20	All	0.20	NA
Cadmium	mg/kg	3	3	1.3	2.6	#18	1.8	NA
Calcium	mg/kg	3	3	1100	1900	#10	1400	NA
Chromium	mg/kg	3	2	0.50	1.7	#10/#18	1.3	NA
Cobalt	mg/kg	3	3	1.7	1.9	#18	1.8	NA
Copper	mg/kg	3	3	7.7	9.1	#18	8.6	NA
Iron	mg/kg	3	3	890	1900	#18	1497	NA
Lead	mg/kg	3	3	2.6	3.9	#18	3.1	NA
Magnesium	mg/kg	3	3	380	910	#10	617	NA
Manganese	mg/kg	3	3	38	54	#10	48	NA
Mercury	mg/kg	3	3	0.076	0.42	#18	0.27	NA
Nickel	mg/kg	3	3	1.5	2.2	#18	1.9	NA
Potassium	mg/kg	3	3	1300	1400	#18	1367	NA
Selenium	mg/kg	3	1	0.50	0.73	#18	0.58	NA
Silver	mg/kg	3	0	0.50	0.50	All	0.50	NA
Sodium	mg/kg	3	3	640	690	#8	660	NA
Thallium	mg/kg	3	0	0.50	0.50	All	0.50	NA
Vanadium	mg/kg	3	3	1.6	3.2	#18	2.6	NA
Zinc	mg/kg	3	3	31	42	#18	36	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B4
Calculations for Risk Assessment Modeling
Site S - Worm Tissue
Sauget, IL

Analyte	Units	Site S						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	1	0	1000	1000	#29	1000	NA
1,2-Dichlorobenzene	ug/kg	1	0	1000	1000	#29	1000	NA
1,3-Dichlorobenzene	ug/kg	1	0	1000	1000	#29	1000	NA
1,4-Dichlorobenzene	ug/kg	1	0	1000	1000	#29	1000	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	1	0	1000	1000	#29	1000	NA
2,4,5-Trichlorophenol	ug/kg	1	0	1000	1000	#29	1000	NA
2,4,6-Trichlorophenol	ug/kg	1	0	1000	1000	#29	1000	NA
2,4-Dichlorophenol	ug/kg	1	0	1000	1000	#29	1000	NA
2,4-Dimethylphenol	ug/kg	1	0	1000	1000	#29	1000	NA
2,4-Dinitrophenol	ug/kg	1	0	5000	5000	#29	5000	NA
2,4-Dinitrotoluene	ug/kg	1	0	1000	1000	#29	1000	NA
2,6-Dinitrotoluene	ug/kg	1	0	1000	1000	#29	1000	NA
2-Chloronaphthalene	ug/kg	1	0	1000	1000	#29	1000	NA
2-Chlorophenol	ug/kg	1	0	1000	1000	#29	1000	NA
2-Methylnaphthalene	ug/kg	1	0	1000	1000	#29	1000	NA
2-Methylphenol (o-Cresol)	ug/kg	1	0	1000	1000	#29	1000	NA
2-Nitroaniline	ug/kg	1	0	5000	5000	#29	5000	NA
2-Nitrophenol	ug/kg	1	0	1000	1000	#29	1000	NA
3,3'-Dichlorobenzidine	ug/kg	1	0	2000	2000	#29	2000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	1	0	1000	1000	#29	1000	NA
3-Nitroaniline	ug/kg	1	0	5000	5000	#29	5000	NA
4,6-Dinitro-2-methylphenol	ug/kg	1	0	5000	5000	#29	5000	NA
4-Bromophenyl Phenyl Ether	ug/kg	1	0	1000	1000	#29	1000	NA
4-Chloro-3-methylphenol	ug/kg	1	0	1000	1000	#29	1000	NA
4-Chloroaniline	ug/kg	1	0	2000	2000	#29	2000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	1	0	1000	1000	#29	1000	NA
4-Nitroaniline	ug/kg	1	0	5000	5000	#29	5000	NA
4-Nitrophenol	ug/kg	1	0	5000	5000	#29	5000	NA
Acenaphthene	ug/kg	1	0	1000	1000	#29	1000	NA
Acenaphthylene	ug/kg	1	0	1000	1000	#29	1000	NA
Anthracene	ug/kg	1	0	1000	1000	#29	1000	NA
Benzo(a)anthracene	ug/kg	1	0	1000	1000	#29	1000	NA
Benzo(a)pyrene	ug/kg	1	0	1000	1000	#29	1000	NA
Benzo(b)fluoranthene	ug/kg	1	0	1000	1000	#29	1000	NA
Benzo(g,h,i)perylene	ug/kg	1	0	1000	1000	#29	1000	NA
Benzo(k)fluoranthene	ug/kg	1	0	1000	1000	#29	1000	NA
bis(2-Chloroethoxy)methane	ug/kg	1	0	1000	1000	#29	1000	NA
bis(2-Chloroethyl)ether	ug/kg	1	0	1000	1000	#29	1000	NA
bis(2-Ethylhexyl)phthalate	ug/kg	1	0	1000	1000	#29	1000	NA
Butyl Benzyl Phthalate	ug/kg	1	0	1000	1000	#29	1000	NA
Carbazole	ug/kg	1	0	1000	1000	#29	1000	NA
Chrysene	ug/kg	1	0	1000	1000	#29	1000	NA
Dibenzo(a,h)anthracene	ug/kg	1	0	1000	1000	#29	1000	NA
Dibenzofuran	ug/kg	1	0	1000	1000	#29	1000	NA
Diethyl Phthalate	ug/kg	1	0	1000	1000	#29	1000	NA
Dimethyl Phthalate	ug/kg	1	0	1000	1000	#29	1000	NA
Di-n-butylphthalate	ug/kg	1	0	1000	1000	#29	1000	NA
Di-n-octylphthalate	ug/kg	1	0	1000	1000	#29	1000	NA
Fluoranthene	ug/kg	1	0	1000	1000	#29	1000	NA
Fluorene	ug/kg	1	0	1000	1000	#29	1000	NA
Hexachlorobenzene	ug/kg	1	0	1000	1000	#29	1000	NA
Hexachlorobutadiene	ug/kg	1	0	1000	1000	#29	1000	NA
Hexachlorocyclopentadiene	ug/kg	1	0	1000	1000	#29	1000	NA
Hexachloroethane	ug/kg	1	0	1000	1000	#29	1000	NA
Indeno(1,2,3-cd)pyrene	ug/kg	1	0	1000	1000	#29	1000	NA
Isophorone	ug/kg	1	0	1000	1000	#29	1000	NA
Naphthalene	ug/kg	1	0	1000	1000	#29	1000	NA
Nitrobenzene	ug/kg	1	0	1000	1000	#29	1000	NA
N-Nitroso-di-n-propylamine	ug/kg	1	0	1000	1000	#29	1000	NA
N-Nitrosodiphenylamine	ug/kg	1	0	1000	1000	#29	1000	NA
Pentachlorophenol	ug/kg	1	0	50	50	#29	50	NA
Phenanthrene	ug/kg	1	0	1000	1000	#29	1000	NA
Phenol	ug/kg	1	0	1000	1000	#29	1000	NA
Pyrene	ug/kg	1	0	1000	1000	#29	1000	NA

Table III-B4
Calculations for Risk Assessment Modeling
Site S - Worm Tissue
Sauget, IL

Analyte	Units	Site S						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	1	0	20	20	#29	20	NA
4,4'-DDE	ug/kg	1	1	4.4	4.4	#29	4.4	NA
4,4'-DDT	ug/kg	1	0	20	20	#29	20	NA
Aldrin	ug/kg	1	0	10	10	#29	10	NA
alpha-BHC	ug/kg	1	0	10	10	#29	10	NA
alpha-Chlordane	ug/kg	1	0	10	10	#29	10	NA
beta-BHC	ug/kg	1	0	10	10	#29	10	NA
delta-BHC	ug/kg	1	0	10	10	#29	10	NA
Dieldrin	ug/kg	1	1	4.5	4.5	#29	4.5	NA
Endosulfan I	ug/kg	1	0	10	10	#29	10	NA
Endosulfan II	ug/kg	1	0	20	20	#29	20	NA
Endosulfan Sulfate	ug/kg	1	0	20	20	#29	20	NA
Endrin	ug/kg	1	0	20	20	#29	20	NA
Endrin Aldehyde	ug/kg	1	0	20	20	#29	20	NA
Endrin Ketone	ug/kg	1	0	20	20	#29	20	NA
gamma-BHC (Lindane)	ug/kg	1	0	10	10	#29	10	NA
gamma-Chlordane	ug/kg	1	0	10	10	#29	10	NA
Heptachlor	ug/kg	1	0	10	10	#29	10	NA
Heptachlor Epoxide	ug/kg	1	0	10	10	#29	10	NA
Methoxychlor	ug/kg	1	0	100	100	#29	100	NA
Toxaphene	ug/kg	1	0	1000	1000	#29	1000	NA
Herbicides								
2,4-D	ug/kg	1	0	25	25	#29	25	NA
2,4-DB	ug/kg	1	0	25	25	#29	25	NA
2,4,5-T	ug/kg	1	0	25	25	#29	25	NA
2,4,5-TP (Silvex)	ug/kg	1	0	25	25	#29	25	NA
Dalapon	ug/kg	1	0	6000	6000	#29	6000	NA
Dicamba	ug/kg	1	0	60	60	#29	60	NA
Dichlorprop	ug/kg	1	0	300	300	#29	300	NA
Dinoseb	ug/kg	1	0	1000	1000	#29	1000	NA
MCPA	ug/kg	1	1	80000	80000	#29	80000	NA
MCPP	ug/kg	1	0	6000	6000	#29	6000	NA
PCBs								
Total PCBs	ug/kg	1	0	50	50	#29	50	NA
Dioxins/Furans								
TEQ	pg/g	1	1	5.0	5.0	#29	5.0	NA
Metals								
Aluminum	mg/kg	1	1	790	790	#29	790	NA
Antimony	mg/kg	1	0	1.0	1.0	#29	1.0	NA
Arsenic	mg/kg	1	1	5.8	5.8	#29	5.8	NA
Barium	mg/kg	1	1	13	13	#29	13	NA
Beryllium	mg/kg	1	0	0.20	0.20	#29	0.20	NA
Cadmium	mg/kg	1	1	1.7	1.7	#29	1.7	NA
Calcium	mg/kg	1	1	930	930	#29	930	NA
Chromium	mg/kg	1	1	1.6	1.6	#29	1.6	NA
Cobalt	mg/kg	1	1	1.8	1.8	#29	1.8	NA
Copper	mg/kg	1	1	5.6	5.6	#29	5.6	NA
Iron	mg/kg	1	1	1400	1400	#29	1400	NA
Lead	mg/kg	1	1	3.8	3.8	#29	3.8	NA
Magnesium	mg/kg	1	1	370	370	#29	370	NA
Manganese	mg/kg	1	1	48	48	#29	48	NA
Mercury	mg/kg	1	1	0.078	0.078	#29	0.078	NA
Nickel	mg/kg	1	1	1.4	1.4	#29	1.4	NA
Potassium	mg/kg	1	1	1200	1200	#29	1200	NA
Selenium	mg/kg	1	0	0.50	0.50	#29	0.50	NA
Silver	mg/kg	1	0	0.50	0.50	#29	0.50	NA
Sodium	mg/kg	1	1	650	650	#29	650	NA
Thallium	mg/kg	1	0	0.50	0.50	#29	0.50	NA
Vanadium	mg/kg	1	1	2.5	2.5	#29	2.5	NA
Zinc	mg/kg	1	1	32	32	#29	32	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B4
Calculations for Risk Assessment Modeling
Site Q - Worm Tissue
Sauget, IL

Analyte	Units	Site Q						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	13	0	495	1000	Various	845	NA
1,2-Dichlorobenzene	ug/kg	13	0	495	1000	Various	845	NA
1,3-Dichlorobenzene	ug/kg	13	0	495	1000	Various	845	NA
1,4-Dichlorobenzene	ug/kg	13	0	495	1000	Various	845	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	13	0	495	1000	Various	845	NA
2,4,5-Trichlorophenol	ug/kg	13	0	495	1000	Various	845	NA
2,4,6-Trichlorophenol	ug/kg	13	0	495	1000	Various	845	NA
2,4-Dichlorophenol	ug/kg	13	0	495	1000	Various	845	NA
2,4-Dimethylphenol	ug/kg	13	0	495	1000	Various	845	NA
2,4-Dinitrophenol	ug/kg	13	0	2550	5000	Various	4246	NA
2,4-Dinitrotoluene	ug/kg	13	0	495	1000	Various	845	NA
2,6-Dinitrotoluene	ug/kg	13	0	495	1000	Various	845	NA
2-Chloronaphthalene	ug/kg	13	0	495	1000	Various	845	NA
2-Chlorophenol	ug/kg	13	0	495	1000	Various	845	NA
2-Methylnaphthalene	ug/kg	13	0	495	1000	Various	845	NA
2-Methylphenol (o-Cresol)	ug/kg	13	0	495	1000	Various	845	NA
2-Nitroaniline	ug/kg	13	0	2550	5000	Various	4246	NA
2-Nitrophenol	ug/kg	13	0	495	1000	Various	845	NA
3,3'-Dichlorobenzidine	ug/kg	13	0	1000	2000	Various	1692	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	13	0	495	1000	Various	845	NA
3-Nitroaniline	ug/kg	13	0	2550	5000	Various	4246	NA
4,6-Dinitro-2-methylphenol	ug/kg	13	0	2550	5000	Various	4246	NA
4-Bromophenyl Phenyl Ether	ug/kg	13	0	495	1000	Various	845	NA
4-Chloro-3-methylphenol	ug/kg	13	0	495	1000	Various	845	NA
4-Chloroaniline	ug/kg	13	0	1000	2000	Various	1692	NA
4-Chlorophenyl Phenyl Ether	ug/kg	13	0	495	1000	Various	845	NA
4-Nitroaniline	ug/kg	13	0	2550	5000	Various	4246	NA
4-Nitrophenol	ug/kg	13	0	2550	5000	Various	4246	NA
Acenaphthene	ug/kg	13	0	495	1000	Various	845	NA
Acenaphthylene	ug/kg	13	0	495	1000	Various	845	NA
Anthracene	ug/kg	13	0	495	1000	Various	845	NA
Benzo(a)anthracene	ug/kg	13	0	495	1000	Various	845	NA
Benzo(a)pyrene	ug/kg	13	1	320	1000	Various	831	NA
Benzo(b)fluoranthene	ug/kg	13	1	370	1000	Various	835	NA
Benzo(g,h,i)perylene	ug/kg	13	1	495	1000	Various	808	NA
Benzo(k)fluoranthene	ug/kg	13	1	320	1000	Various	831	NA
bis(2-Chloroethoxy)methane	ug/kg	13	0	495	1000	Various	845	NA
bis(2-Chloroethyl)ether	ug/kg	13	0	495	1000	Various	845	NA
bis(2-Ethylhexyl)phthalate	ug/kg	13	0	495	1000	Various	845	NA
Butyl Benzyl Phthalate	ug/kg	13	0	495	1000	Various	845	NA
Carbazole	ug/kg	13	0	495	1000	Various	845	NA
Chrysene	ug/kg	13	1	240	1000	Various	825	NA
Dibenzo(a,h)anthracene	ug/kg	13	0	495	1000	Various	845	NA
Dibenzofuran	ug/kg	13	0	495	1000	Various	845	NA
Diethyl Phthalate	ug/kg	13	0	495	1000	Various	845	NA
Dimethyl Phthalate	ug/kg	13	0	495	1000	Various	845	NA
Di-n-butylphthalate	ug/kg	13	0	495	1000	Various	845	NA
Di-n-octylphthalate	ug/kg	13	1	250	1000	Various	826	NA
Fluoranthene	ug/kg	13	0	495	1000	Various	845	NA
Fluorene	ug/kg	13	0	495	1000	Various	845	NA
Hexachlorobenzene	ug/kg	13	0	495	1000	Various	845	NA
Hexachlorobutadiene	ug/kg	13	0	495	1000	Various	845	NA
Hexachlorocyclopentadiene	ug/kg	13	0	495	1000	Various	845	NA
Hexachloroethane	ug/kg	13	0	495	1000	Various	845	NA
Indeno(1,2,3-cd)pyrene	ug/kg	13	0	495	1000	Various	845	NA
Isophorone	ug/kg	13	0	495	1000	Various	845	NA
Naphthalene	ug/kg	13	0	495	1000	Various	845	NA
Nitrobenzene	ug/kg	13	0	495	1000	Various	845	NA
N-Nitroso-di-n-propylamine	ug/kg	13	0	495	1000	Various	845	NA
N-Nitrosodiphenylamine	ug/kg	13	0	495	1000	Various	845	NA
Pentachlorophenol	ug/kg	13	9	10	100	#20/#11	34	NA
Phenanthrene	ug/kg	13	0	495	1000	Various	845	NA
Phenol	ug/kg	13	0	495	1000	Various	845	NA
Pyrene	ug/kg	13	0	495	1000	Various	845	NA

Table III-B4
Calculations for Risk Assessment Modeling
Site Q - Worm Tissue
Sauget, IL

Analyte	Units	Site Q						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	13	0	10	20	Various	18	NA
4,4'-DDE	ug/kg	13	5	2.4	180	#26	26	NA
4,4'-DDT	ug/kg	13	7	2.5	750	#20	184	NA
Aldrin	ug/kg	13	0	5.0	10	Various	8.8	NA
alpha-BHC	ug/kg	13	2	1.8	10	Various	7.8	NA
alpha-Chlordane	ug/kg	13	1	5.0	51	#23	12	NA
beta-BHC	ug/kg	13	1	5.0	47	#23	12	NA
delta-BHC	ug/kg	13	6	1.1	12	#20	8	NA
Dieldrin	ug/kg	13	12	2.1	400	#20	115	NA
Endosulfan I	ug/kg	13	0	5.0	10	Various	8.8	NA
Endosulfan II	ug/kg	13	0	10	20	Various	18	NA
Endosulfan Sulfate	ug/kg	13	3	2.7	20	Various	16	NA
Endrin	ug/kg	13	0	10	20	Various	18	NA
Endrin Aldehyde	ug/kg	13	0	10	20	Various	18	NA
Endrin Ketone	ug/kg	13	2	10	20	Various	17	NA
gamma-BHC (Lindane)	ug/kg	13	0	5.0	10	Various	8.8	NA
gamma-Chlordane	ug/kg	13	1	2.4	10	Various	8.3	NA
Heptachlor	ug/kg	13	2	2.8	10	Various	8.0	NA
Heptachlor Epoxide	ug/kg	13	0	5.0	10	Various	8.8	NA
Methoxychlor	ug/kg	13	5	5.2	100	Various	64	NA
Toxaphene	ug/kg	13	0	500	1000	Various	885	NA
Herbicides								
2,4-D	ug/kg	13	4	13	180	#1	59	NA
2,4-DB	ug/kg	12	0	13	50	#20/#11	26	NA
2,4,5-T	ug/kg	12	1	13	50	#20/#11	26	NA
2,4,5-TP (Silvex)	ug/kg	13	1	13	50	#20/#11	25	NA
Dalapon	ug/kg	12	0	3000	12000	#20/#11	6250	NA
Dicamba	ug/kg	12	0	30	120	#20/#11	63	NA
Dichlorprop	ug/kg	12	0	150	600	#20/#11	313	NA
Dinoseb	ug/kg	13	0	495	1000	Various	845	NA
MCPA	ug/kg	12	10	6000	91000	#21	41450	NA
MCPP	ug/kg	12	0	3000	12000	#20/#11	6250	NA
PCBs								
Total PCBs	ug/kg	13	8	25	16870	#20	3272	NA
Dioxins/Furans								
TEQ	pg/g	13	13	1.5	22	#20	6.3	NA
Metals								
Aluminum	mg/kg	13	13	250	1900	#23	670	NA
Antimony	mg/kg	13	1	0.42	1.0	Various	0.93	NA
Arsenic	mg/kg	13	13	3.4	7.3	#21	5.2	NA
Barium	mg/kg	13	13	7.0	36	#23	14	NA
Beryllium	mg/kg	13	0	0.18	0.20	Various	0.20	NA
Cadmium	mg/kg	13	13	0.75	1.5	#21/#20	1.1	NA
Calcium	mg/kg	13	13	690	1600	#13	1083	NA
Chromium	mg/kg	13	12	0.47	3.4	#23	1.3	NA
Cobalt	mg/kg	13	13	1.1	2.1	#20	1.5	NA
Copper	mg/kg	13	13	2.0	10	#26	4.6	NA
Iron	mg/kg	13	13	510	3200	#23	1242	NA
Lead	mg/kg	13	13	1.6	8.4	#23	3.9	NA
Magnesium	mg/kg	13	13	220	660	#23	398	NA
Manganese	mg/kg	13	13	14	52	#23	31	NA
Mercury	mg/kg	13	12	0.010	0.095	#21	0.024	NA
Nickel	mg/kg	13	9	1.2	2.8	#23	1.8	NA
Potassium	mg/kg	13	13	840	1400	Various	1226	NA
Selenium	mg/kg	13	7	0.45	0.72	#20	0.54	NA
Silver	mg/kg	13	0	0.46	0.50	Various	0.49	NA
Sodium	mg/kg	13	13	470	730	#21	612	NA
Thallium	mg/kg	13	0	0.46	0.50	Various	0.49	NA
Vanadium	mg/kg	13	13	0.72	4.7	#23	1.9	NA
Zinc	mg/kg	13	13	19	47	#23	31	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B4
Calculations for Risk Assessment Modeling
Site-Wide - Worm Tissue
Sauget, IL

Analyte	Units	Site-Wide						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	26	0	495	1000	Various	883	967
1,2-Dichlorobenzene	ug/kg	26	0	495	1000	Various	883	967
1,3-Dichlorobenzene	ug/kg	26	0	495	1000	Various	883	967
1,4-Dichlorobenzene	ug/kg	26	0	495	1000	Various	883	967
2,2'-Oxybis(1-Chloropropane)	ug/kg	26	0	495	1000	Various	883	967
2,4,5-Trichlorophenol	ug/kg	26	0	495	1000	Various	883	967
2,4,6-Trichlorophenol	ug/kg	26	0	495	1000	Various	883	967
2,4-Dichlorophenol	ug/kg	26	0	495	1000	Various	883	967
2,4-Dimethylphenol	ug/kg	26	0	495	1000	Various	883	977
2,4-Dinitrophenol	ug/kg	26	0	2550	5000	Various	4435	4839
2,4-Dinitrotoluene	ug/kg	26	0	495	1000	Various	883	967
2,6-Dinitrotoluene	ug/kg	26	0	495	1000	Various	883	967
2-Chloronaphthalene	ug/kg	26	0	495	1000	Various	883	967
2-Chlorophenol	ug/kg	26	0	495	1000	Various	883	967
2-Methylnaphthalene	ug/kg	26	0	495	1000	Various	883	967
2-Methylphenol (o-Cresol)	ug/kg	26	0	495	1000	Various	883	967
2-Nitroaniline	ug/kg	26	0	2550	5000	Various	4435	4839
2-Nitrophenol	ug/kg	26	0	495	1000	Various	883	967
3,3'-Dichlorobenzidine	ug/kg	26	0	1000	2000	Various	1769	1934
3/4-Methylphenol (m&p-Cresol)	ug/kg	26	0	495	1000	Various	883	967
3-Nitroaniline	ug/kg	26	0	2550	5000	Various	4435	4839
4,6-Dinitro-2-methylphenol	ug/kg	26	0	2550	5000	Various	4435	4839
4-Bromophenyl Phenyl Ether	ug/kg	26	0	495	1000	Various	883	967
4-Chloro-3-methylphenol	ug/kg	26	0	495	1000	Various	883	967
4-Chloroaniline	ug/kg	26	0	1000	2000	Various	1769	1934
4-Chlorophenyl Phenyl Ether	ug/kg	26	0	495	1000	Various	883	967
4-Nitroaniline	ug/kg	26	0	2550	5000	Various	4435	4839
4-Nitrophenol	ug/kg	26	0	2550	5000	Various	4435	4839
Acenaphthene	ug/kg	26	0	495	1000	Various	883	967
Acenaphthylene	ug/kg	26	0	495	1000	Various	883	967
Anthracene	ug/kg	26	0	495	1000	Various	883	967
Benzo(a)anthracene	ug/kg	26	0	495	1000	Various	883	967
Benzo(a)pyrene	ug/kg	26	2	230	1000	Various	867	964
Benzo(b)fluoranthene	ug/kg	26	2	230	1000	Various	868	964
Benzo(g,h,i)perylene	ug/kg	26	1	495	1000	Various	865	952
Benzo(k)fluoranthene	ug/kg	26	2	240	1000	Various	867	964
bis(2-Chloroethoxy)methane	ug/kg	26	0	495	1000	Various	883	967
bis(2-Chloroethyl)ether	ug/kg	26	0	495	1000	Various	883	967
bis(2-Ethylhexyl)phthalate	ug/kg	26	0	495	1000	Various	883	967
Butyl Benzyl Phthalate	ug/kg	26	0	495	1000	Various	883	967
Carbazole	ug/kg	26	0	495	1000	Various	883	967
Chrysene	ug/kg	26	2	120	1000	Various	859	964
Dibenzo(a,h)anthracene	ug/kg	26	0	495	1000	Various	883	967
Dibenzofuran	ug/kg	26	0	495	1000	Various	883	967
Diethyl Phthalate	ug/kg	26	0	495	1000	Various	883	967
Dimethyl Phthalate	ug/kg	26	0	495	1000	Various	883	967
Di-n-butylphthalate	ug/kg	26	0	495	1000	Various	883	967
Di-n-octylphthalate	ug/kg	26	1	250	1000	Various	874	966
Fluoranthene	ug/kg	26	0	495	1000	Various	883	967
Fluorene	ug/kg	26	0	495	1000	Various	883	967
Hexachlorobenzene	ug/kg	26	0	495	1000	Various	883	967
Hexachlorobutadiene	ug/kg	26	0	495	1000	Various	883	967
Hexachlorocyclopentadiene	ug/kg	26	0	495	1000	Various	883	967
Hexachloroethane	ug/kg	26	0	495	1000	Various	883	967
Indeno(1,2,3-cd)pyrene	ug/kg	26	0	495	1000	Various	883	967
Isophorone	ug/kg	26	0	495	1000	Various	883	967
Naphthalene	ug/kg	26	0	495	1000	Various	883	967
Nitrobenzene	ug/kg	26	0	495	1000	Various	883	967
N-Nitroso-di-n-propylamine	ug/kg	26	0	495	1000	Various	883	967
N-Nitrosodiphenylamine	ug/kg	26	0	495	1000	Various	883	967
Pentachlorophenol	ug/kg	26	16	8.8	1400	#8	100	203
Phenanthrene	ug/kg	26	0	495	1000	Various	883	967
Phenol	ug/kg	26	0	495	1000	Various	883	967
Pyrene	ug/kg	26	0	495	1000	Various	883	967

Table III-B4
Calculations for Risk Assessment Modeling
Site-Wide - Worm Tissue
Sauget, IL

Analyte	Units	Site-Wide						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	26	1	10	140	#8	23	32
4,4'-DDE	ug/kg	26	7	2.4	180	#26	21	34
4,4'-DDT	ug/kg	26	16	2.5	1200	#8	176	296
Aldrin	ug/kg	26	3	2.6	21	#8	9.0	10
alpha-BHC	ug/kg	26	3	1.8	10	Various	8.5	9.5
alpha-Chlordane	ug/kg	26	1	5.0	51	#23	11	14
beta-BHC	ug/kg	26	1	5.0	47	#23	10	13
delta-BHC	ug/kg	26	13	1.1	51	#8	10	14
Dieldrin	ug/kg	26	21	2.1	400	#20	84	132
Endosulfan I	ug/kg	26	1	1.9	10	Various	8.7	9.7
Endosulfan II	ug/kg	26	1	10	39	#8	19	21
Endosulfan Sulfate	ug/kg	26	8	2.7	20	Various	15	18
Endrin	ug/kg	26	2	10	58	#10	20	23
Endrin Aldehyde	ug/kg	26	1	4.4	20	Various	17	19
Endrin Ketone	ug/kg	26	4	8.0	31	#4	18	20
gamma-BHC (Lindane)	ug/kg	26	1	5.0	18	#8	9.3	10
gamma-Chlordane	ug/kg	26	2	2.4	10	Various	8.5	9.5
Heptachlor	ug/kg	26	4	2.8	10	Various	8.4	9.3
Heptachlor Epoxide	ug/kg	26	1	5.0	10	Various	9.0	9.7
Methoxychlor	ug/kg	26	12	5.2	100	Various	60	76
Toxaphene	ug/kg	26	0	500	1000	Various	904	981
Herbicides								
2,4-D	ug/kg	26	9	13	630	#6	81	127
2,4-DB	ug/kg	25	0	13	50	Various	31	37
2,4,5-T	ug/kg	25	2	7.6	50	Various	31	36
2,4,5-TP (Silvex)	ug/kg	26	2	6.1	50	Various	30	36
Dalapon	ug/kg	25	0	3000	12000	Various	7440	8760
Dicamba	ug/kg	25	0	30	120	Various	74	88
Dichlorprop	ug/kg	25	1	120	600	Various	365	434
Dinoseb	ug/kg	26	0	495	1000	Various	883	967
MCPA	ug/kg	25	22	3000	91000	#21	42416	53135
MCPP	ug/kg	25	0	3000	12000	Various	7440	8760
PCBs								
Total PCBs	ug/kg	26	13	9.0	32614	#8	4050	7433
Dioxins/Furans								
TEQ	pg/g	26	26	0.68	1320	#8	95	310
Metals								
Aluminum	mg/kg	26	26	250	1900	#23	690	833
Antimony	mg/kg	26	3	0.42	1.0	Various	0.91	0.98
Arsenic	mg/kg	26	26	3.4	12	#7	5.8	6.5
Barium	mg/kg	26	26	5.3	36	#23	13	16
Beryllium	mg/kg	26	2	0.18	0.47	#2	0.21	0.23
Cadmium	mg/kg	26	26	0.67	2.6	#18	1.2	1.3
Calcium	mg/kg	26	26	670	2800	#2	1185	1390
Chromium	mg/kg	26	22	0.46	11	#2	1.6	2.4
Cobalt	mg/kg	26	26	1.1	5.9	#2	1.8	2.2
Copper	mg/kg	26	26	2.0	14	#2	5.7	6.9
Iron	mg/kg	26	26	510	6800	#2	1430	1900
Lead	mg/kg	26	26	0.76	15	#2	4.6	6.1
Magnesium	mg/kg	26	26	170	940	#24	424	497
Manganese	mg/kg	26	26	7.8	91	#2	36	42
Mercury	mg/kg	26	25	0.010	0.42	#18	0.059	0.095
Nickel	mg/kg	26	19	1.2	18	#2	2.6	3.9
Potassium	mg/kg	26	26	840	1400	Various	1240	1299
Selenium	mg/kg	26	14	0.45	2.2	#2	0.61	0.75
Silver	mg/kg	26	0	0.46	0.50	Various	0.49	0.50
Sodium	mg/kg	26	26	470	730	#21	618	643
Thallium	mg/kg	26	0	0.46	0.50	Various	0.49	0.50
Vanadium	mg/kg	26	26	0.72	18	#2	2.8	4.0
Zinc	mg/kg	26	26	19	98	#7	37	44

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UC
concentration based entirely on adjusted non-detected values

Table III-B5
Calculations for Risk Assessment Modeling
Off-Site Areas - Terrestrial Invertebrates
Sauget, IL

Analyte	Units	Off-Site Areas						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	1	0	495	495	INP1	495	NA
1,2-Dichlorobenzene	ug/kg	1	0	495	495	INP1	495	NA
1,3-Dichlorobenzene	ug/kg	1	0	495	495	INP1	495	NA
1,4-Dichlorobenzene	ug/kg	1	0	495	495	INP1	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	1	0	495	495	INP1	495	NA
2,4,5-Trichlorophenol	ug/kg	1	0	495	495	INP1	495	NA
2,4,6-Trichlorophenol	ug/kg	1	0	495	495	INP1	495	NA
2,4-Dichlorophenol	ug/kg	1	0	495	495	INP1	495	NA
2,4-Dinitrophenol	ug/kg	1	0	2550	2550	INP1	2550	NA
2,4-Dinitrotoluene	ug/kg	1	0	495	495	INP1	495	NA
2,6-Dinitrotoluene	ug/kg	1	0	495	495	INP1	495	NA
2-Chloronaphthalene	ug/kg	1	0	495	495	INP1	495	NA
2-Chlorophenol	ug/kg	1	0	495	495	INP1	495	NA
2-Methylnaphthalene	ug/kg	1	0	495	495	INP1	495	NA
2-Methylphenol (o-Cresol)	ug/kg	1	0	495	495	INP1	495	NA
2-Nitroaniline	ug/kg	1	0	2550	2550	INP1	2550	NA
2-Nitrophenol	ug/kg	1	0	495	495	INP1	495	NA
3,3'-Dichlorobenzidine	ug/kg	1	0	1000	1000	INP1	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	1	0	495	495	INP1	495	NA
3-Nitroaniline	ug/kg	1	0	2550	2550	INP1	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	1	0	2550	2550	INP1	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	1	0	495	495	INP1	495	NA
4-Chloro-3-methylphenol	ug/kg	1	0	495	495	INP1	495	NA
4-Chloroaniline	ug/kg	1	0	1000	1000	INP1	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	1	0	495	495	INP1	495	NA
4-Nitroaniline	ug/kg	1	0	2550	2550	INP1	2550	NA
4-Nitrophenol	ug/kg	1	0	2550	2550	INP1	2550	NA
Acenaphthene	ug/kg	1	0	495	495	INP1	495	NA
Acenaphthylene	ug/kg	1	0	495	495	INP1	495	NA
Anthracene	ug/kg	1	0	495	495	INP1	495	NA
Benzo(a)anthracene	ug/kg	1	0	495	495	INP1	495	NA
Benzo(a)pyrene	ug/kg	1	0	495	495	INP1	495	NA
Benzo(b)fluoranthene	ug/kg	1	0	495	495	INP1	495	NA
Benzo(g,h,i)perylene	ug/kg	1	0	495	495	INP1	495	NA
Benzo(k)fluoranthene	ug/kg	1	0	495	495	INP1	495	NA
bis(2-Chloroethoxy)methane	ug/kg	1	0	495	495	INP1	495	NA
bis(2-Chloroethyl)ether	ug/kg	1	0	495	495	INP1	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	1	0	495	495	INP1	495	NA
Butyl Benzyl Phthalate	ug/kg	1	0	495	495	INP1	495	NA
Carbazole	ug/kg	1	0	495	495	INP1	495	NA
Chrysene	ug/kg	1	0	495	495	INP1	495	NA
Dibenzo(a,h)anthracene	ug/kg	1	0	495	495	INP1	495	NA
Dibenzofuran	ug/kg	1	0	495	495	INP1	495	NA
Diethyl Phthalate	ug/kg	1	0	495	495	INP1	495	NA
Dimethyl Phthalate	ug/kg	1	0	495	495	INP1	495	NA
Di-n-butylphthalate	ug/kg	1	0	495	495	INP1	495	NA
Di-n-octylphthalate	ug/kg	1	0	495	495	INP1	495	NA
Fluoranthene	ug/kg	1	0	495	495	INP1	495	NA
Fluorene	ug/kg	1	0	495	495	INP1	495	NA
Hexachlorobenzene	ug/kg	1	0	495	495	INP1	495	NA
Hexachlorobutadiene	ug/kg	1	0	495	495	INP1	495	NA
Hexachlorocyclopentadiene	ug/kg	1	0	495	495	INP1	495	NA
Hexachloroethane	ug/kg	1	0	495	495	INP1	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	1	0	495	495	INP1	495	NA
Isophorone	ug/kg	1	0	495	495	INP1	495	NA
Naphthalene	ug/kg	1	0	495	495	INP1	495	NA
Nitrobenzene	ug/kg	1	0	495	495	INP1	495	NA
N-Nitroso-di-n-propylamine	ug/kg	1	0	495	495	INP1	495	NA
N-Nitrosodiphenylamine	ug/kg	1	0	495	495	INP1	495	NA
Pentachlorophenol	ug/kg	1	0	26	26	INP1	26	NA
Phenanthrene	ug/kg	1	0	495	495	INP1	495	NA
Phenol	ug/kg	1	0	495	495	INP1	495	NA
Pyrene	ug/kg	1	0	495	495	INP1	495	NA

Table III-B5
Calculations for Risk Assessment Modeling
Off-Site Areas - Terrestrial Invertebrates
Sauget, IL

Analyte	Units	Off-Site Areas						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
4,4'-DDE	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
4,4'-DDT	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
Aldrin	ug/kg	1	1	1.9	1.9	INP1	1.9	NA
alpha-BHC	ug/kg	1	0	2.6	2.6	INP1	2.6	NA
alpha-Chlordane	ug/kg	1	0	2.6	2.6	INP1	2.6	NA
beta-BHC	ug/kg	1	0	2.6	2.6	INP1	2.6	NA
delta-BHC	ug/kg	1	1	1.5	1.5	INP1	1.5	NA
Dieldrin	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
Endosulfan I	ug/kg	1	0	2.6	2.6	INP1	2.6	NA
Endosulfan II	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
Endosulfan Sulfate	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
Endrin	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
Endrin Aldehyde	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
Endrin Ketone	ug/kg	1	1	4.2	4.2	INP1	4.2	NA
gamma-BHC (Lindane)	ug/kg	1	1	1.5	1.5	INP1	1.5	NA
gamma-Chlordane	ug/kg	1	1	1.6	1.6	INP1	1.6	NA
Heptachlor	ug/kg	1	1	1.7	1.7	INP1	1.7	NA
Heptachlor Epoxide	ug/kg	1	0	2.6	2.6	INP1	2.6	NA
Methoxychlor	ug/kg	1	0	26	26	INP1	26	NA
Toxaphene	ug/kg	1	0	255	255	INP1	255	NA
Herbicides								
2,4-D	ug/kg	1	1	109	109	INP1	109	NA
2,4-DB	ug/kg	1	1	20	20	INP1	20	NA
2,4,5-T	ug/kg	1	0	13	13	INP1	13	NA
2,4,5-TP (Silvex)	ug/kg	1	0	13	13	INP1	13	NA
Dalapon	ug/kg	1	0	3000	3000	INP1	3000	NA
Dicamba	ug/kg	1	0	30	30	INP1	30	NA
Dichlorprop	ug/kg	1	0	150	150	INP1	150	NA
Dinoseb	ug/kg	1	0	495	495	INP1	495	NA
MCPA	ug/kg	1	0	3000	3000	INP1	3000	NA
MCPP	ug/kg	1	0	3000	3000	INP1	3000	NA
PCBs								
Total PCBs	pg/g	1	1	32	32	INP1	32	NA
Dioxins/Furans								
TEQ	ug/kg	1	1	0.59	0.59	INP1	0.59	NA
Metals								
Aluminum	mg/kg	1	1	24	24	INP1	24	NA
Antimony	mg/kg	1	0	0.90	0.90	INP1	0.90	NA
Arsenic	mg/kg	1	0	0.45	0.45	INP1	0.45	NA
Barium	mg/kg	1	1	2.2	2.2	INP1	2.2	NA
Beryllium	mg/kg	1	0	0.18	0.18	INP1	0.18	NA
Cadmium	mg/kg	1	1	0.72	0.72	INP1	0.72	NA
Calcium	mg/kg	1	1	598	598	INP1	598	NA
Chromium	mg/kg	1	1	0.19	0.19	INP1	0.19	NA
Cobalt	mg/kg	1	0	0.45	0.45	INP1	0.45	NA
Copper	mg/kg	1	1	22	22	INP1	22	NA
Iron	mg/kg	1	1	60	60	INP1	60	NA
Lead	mg/kg	1	1	1.0	1.0	INP1	1.0	NA
Magnesium	mg/kg	1	1	395	395	INP1	395	NA
Manganese	mg/kg	1	1	11	11	INP1	11	NA
Mercury	mg/kg	1	1	0.15	0.15	INP1	0.15	NA
Nickel	mg/kg	1	0	1.8	1.8	INP1	1.8	NA
Potassium	mg/kg	1	1	3500	3500	INP1	3500	NA
Selenium	mg/kg	1	0	0.66	0.66	INP1	0.66	NA
Silver	mg/kg	1	1	0.49	0.49	INP1	0.49	NA
Sodium	mg/kg	1	1	315	315	INP1	315	NA
Thallium	mg/kg	1	0	0.45	0.45	INP1	0.45	NA
Vanadium	mg/kg	1	0	0.45	0.45	INP1	0.45	NA
Zinc	mg/kg	1	1	62	62	INP1	62	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B5
Calculations for Risk Assessment Modeling
Site P - Terrestrial Invertebrates
Sauget, IL

Analyte	Units	Site P						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	1	0	495	495	INP1	495	NA
1,2-Dichlorobenzene	ug/kg	1	0	495	495	INP1	495	NA
1,3-Dichlorobenzene	ug/kg	1	0	495	495	INP1	495	NA
1,4-Dichlorobenzene	ug/kg	1	0	495	495	INP1	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	1	0	495	495	INP1	495	NA
2,4,5-Trichlorophenol	ug/kg	1	0	495	495	INP1	495	NA
2,4,6-Trichlorophenol	ug/kg	1	0	495	495	INP1	495	NA
2,4-Dichlorophenol	ug/kg	1	0	495	495	INP1	495	NA
2,4-Dinitrophenol	ug/kg	1	0	2550	2550	INP1	2550	NA
2,4-Dinitrotoluene	ug/kg	1	0	495	495	INP1	495	NA
2,6-Dinitrotoluene	ug/kg	1	0	495	495	INP1	495	NA
2-Chloronaphthalene	ug/kg	1	0	495	495	INP1	495	NA
2-Chlorophenol	ug/kg	1	0	495	495	INP1	495	NA
2-Methylnaphthalene	ug/kg	1	0	495	495	INP1	495	NA
2-Methylphenol (o-Cresol)	ug/kg	1	0	495	495	INP1	495	NA
2-Nitroaniline	ug/kg	1	0	2550	2550	INP1	2550	NA
2-Nitrophenol	ug/kg	1	0	495	495	INP1	495	NA
3,3'-Dichlorobenzidine	ug/kg	1	0	1000	1000	INP1	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	1	0	495	495	INP1	495	NA
3-Nitroaniline	ug/kg	1	0	2550	2550	INP1	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	1	0	2550	2550	INP1	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	1	0	495	495	INP1	495	NA
4-Chloro-3-methylphenol	ug/kg	1	0	495	495	INP1	495	NA
4-Chloroaniline	ug/kg	1	0	1000	1000	INP1	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	1	0	495	495	INP1	495	NA
4-Nitroaniline	ug/kg	1	0	2550	2550	INP1	2550	NA
4-Nitrophenol	ug/kg	1	0	2550	2550	INP1	2550	NA
Acenaphthene	ug/kg	1	0	495	495	INP1	495	NA
Acenaphthylene	ug/kg	1	0	495	495	INP1	495	NA
Anthracene	ug/kg	1	0	495	495	INP1	495	NA
Benzo(a)anthracene	ug/kg	1	0	495	495	INP1	495	NA
Benzo(a)pyrene	ug/kg	1	0	495	495	INP1	495	NA
Benzo(b)fluoranthene	ug/kg	1	0	495	495	INP1	495	NA
Benzo(g,h,i)perylene	ug/kg	1	0	495	495	INP1	495	NA
Benzo(k)fluoranthene	ug/kg	1	0	495	495	INP1	495	NA
bis(2-Chloroethoxy)methane	ug/kg	1	0	495	495	INP1	495	NA
bis(2-Chloroethyl)ether	ug/kg	1	0	495	495	INP1	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	1	0	495	495	INP1	495	NA
Butyl Benzyl Phthalate	ug/kg	1	0	495	495	INP1	495	NA
Carbazole	ug/kg	1	0	495	495	INP1	495	NA
Chrysene	ug/kg	1	0	495	495	INP1	495	NA
Dibenzo(a,h)anthracene	ug/kg	1	0	495	495	INP1	495	NA
Dibenzofuran	ug/kg	1	0	495	495	INP1	495	NA
Diethyl Phthalate	ug/kg	1	0	495	495	INP1	495	NA
Dimethyl Phthalate	ug/kg	1	0	495	495	INP1	495	NA
Di-n-butylphthalate	ug/kg	1	0	495	495	INP1	495	NA
Di-n-octylphthalate	ug/kg	1	0	495	495	INP1	495	NA
Fluoranthene	ug/kg	1	0	495	495	INP1	495	NA
Fluorene	ug/kg	1	0	495	495	INP1	495	NA
Hexachlorobenzene	ug/kg	1	0	495	495	INP1	495	NA
Hexachlorobutadiene	ug/kg	1	0	495	495	INP1	495	NA
Hexachlorocyclopentadiene	ug/kg	1	0	495	495	INP1	495	NA
Hexachloroethane	ug/kg	1	0	495	495	INP1	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	1	0	495	495	INP1	495	NA
Isophorone	ug/kg	1	0	495	495	INP1	495	NA
Naphthalene	ug/kg	1	0	495	495	INP1	495	NA
Nitrobenzene	ug/kg	1	0	495	495	INP1	495	NA
N-Nitroso-di-n-propylamine	ug/kg	1	0	495	495	INP1	495	NA
N-Nitrosodiphenylamine	ug/kg	1	0	495	495	INP1	495	NA
Pentachlorophenol	ug/kg	1	0	26	26	INP1	26	NA
Phenanthrene	ug/kg	1	0	495	495	INP1	495	NA
Phenol	ug/kg	1	0	495	495	INP1	495	NA
Pyrene	ug/kg	1	0	495	495	INP1	495	NA

Table III-B5
Calculations for Risk Assessment Modeling
Site P - Terrestrial Invertebrates
Sauget, IL

Analyte	Units	Site P						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
4,4'-DDE	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
4,4'-DDT	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
Aldrin	ug/kg	1	1	1.9	1.9	INP1	1.9	NA
alpha-BHC	ug/kg	1	0	2.6	2.6	INP1	2.6	NA
alpha-Chlordane	ug/kg	1	0	2.6	2.6	INP1	2.6	NA
beta-BHC	ug/kg	1	0	2.6	2.6	INP1	2.6	NA
delta-BHC	ug/kg	1	1	1.5	1.5	INP1	1.5	NA
Dieldrin	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
Endosulfan I	ug/kg	1	0	2.6	2.6	INP1	2.6	NA
Endosulfan II	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
Endosulfan Sulfate	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
Endrin	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
Endrin Aldehyde	ug/kg	1	0	5.0	5.0	INP1	5.0	NA
Endrin Ketone	ug/kg	1	1	4.2	4.2	INP1	4.2	NA
gamma-BHC (Lindane)	ug/kg	1	1	1.5	1.5	INP1	1.5	NA
gamma-Chlordane	ug/kg	1	1	1.6	1.6	INP1	1.6	NA
Heptachlor	ug/kg	1	1	1.7	1.7	INP1	1.7	NA
Heptachlor Epoxide	ug/kg	1	0	2.6	2.6	INP1	2.6	NA
Methoxychlor	ug/kg	1	0	26	26	INP1	26	NA
Toxaphene	ug/kg	1	0	255	255	INP1	255	NA
Herbicides								
2,4-D	ug/kg	1	1	109	109	INP1	109	NA
2,4-DB	ug/kg	1	1	20	20	INP1	20	NA
2,4,5-T	ug/kg	1	0	13	13	INP1	13	NA
2,4,5-TP (Silvex)	ug/kg	1	0	13	13	INP1	13	NA
Dalapon	ug/kg	1	0	3000	3000	INP1	3000	NA
Dicamba	ug/kg	1	0	30	30	INP1	30	NA
Dichlorprop	ug/kg	1	0	150	150	INP1	150	NA
Dinoseb	ug/kg	1	0	495	495	INP1	495	NA
MCPA	ug/kg	1	0	3000	3000	INP1	3000	NA
MCPP	ug/kg	1	0	3000	3000	INP1	3000	NA
PCBs								
Total PCBs	ug/kg	1	0	25	25	INP1	25	NA
Dioxins/Furans								
TEQ	pg/g	1	1	3.4	3.4	INP1	3.4	NA
Metals								
Aluminum	mg/kg	1	1	16	16	INP1	16	NA
Antimony	mg/kg	1	0	0.90	0.90	INP1	0.90	NA
Arsenic	mg/kg	1	0	0.46	0.46	INP1	0.46	NA
Barium	mg/kg	1	1	1.8	1.8	INP1	1.8	NA
Beryllium	mg/kg	1	0	0.18	0.18	INP1	0.18	NA
Cadmium	mg/kg	1	1	0.81	0.81	INP1	0.81	NA
Calcium	mg/kg	1	1	740	740	INP1	740	NA
Chromium	mg/kg	1	1	0.21	0.21	INP1	0.21	NA
Cobalt	mg/kg	1	0	0.46	0.46	INP1	0.46	NA
Copper	mg/kg	1	1	14	14	INP1	14	NA
Iron	mg/kg	1	1	43	43	INP1	43	NA
Lead	mg/kg	1	1	2.0	2.0	INP1	2.0	NA
Magnesium	mg/kg	1	1	380	380	INP1	380	NA
Manganese	mg/kg	1	1	4.5	4.5	INP1	4.5	NA
Mercury	mg/kg	1	1	0.18	0.18	INP1	0.18	NA
Nickel	mg/kg	1	0	1.8	1.8	INP1	1.8	NA
Potassium	mg/kg	1	1	3400	3400	INP1	3400	NA
Selenium	mg/kg	1	0	1.3	1.3	INP1	1.3	NA
Silver	mg/kg	1	0	0.46	0.46	INP1	0.46	NA
Sodium	mg/kg	1	1	360	360	INP1	360	NA
Thallium	mg/kg	1	0	0.46	0.46	INP1	0.46	NA
Vanadium	mg/kg	1	0	0.46	0.46	INP1	0.46	NA
Zinc	mg/kg	1	1	87	87	INP1	87	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B5
Calculations for Risk Assessment Modeling
Sites O, R and S - Terrestrial Invertebrates
Sauget, IL

Analyte	Units	Sites O, R and S						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	1	0	495	495	INROS1	495	NA
1,2-Dichlorobenzene	ug/kg	1	0	495	495	INROS1	495	NA
1,3-Dichlorobenzene	ug/kg	1	0	495	495	INROS1	495	NA
1,4-Dichlorobenzene	ug/kg	1	0	495	495	INROS1	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	1	0	495	495	INROS1	495	NA
2,4,5-Trichlorophenol	ug/kg	1	0	495	495	INROS1	495	NA
2,4,6-Trichlorophenol	ug/kg	1	0	495	495	INROS1	495	NA
2,4-Dichlorophenol	ug/kg	1	0	495	495	INROS1	495	NA
2,4-Dinitrophenol	ug/kg	1	0	2550	2550	INROS1	2550	NA
2,4-Dinitrotoluene	ug/kg	1	0	495	495	INROS1	495	NA
2,6-Dinitrotoluene	ug/kg	1	0	495	495	INROS1	495	NA
2-Chloronaphthalene	ug/kg	1	0	495	495	INROS1	495	NA
2-Chlorophenol	ug/kg	1	0	495	495	INROS1	495	NA
2-Methylnaphthalene	ug/kg	1	0	495	495	INROS1	495	NA
2-Methylphenol (o-Cresol)	ug/kg	1	0	495	495	INROS1	495	NA
2-Nitroaniline	ug/kg	1	0	2550	2550	INROS1	2550	NA
2-Nitrophenol	ug/kg	1	0	495	495	INROS1	495	NA
3,3'-Dichlorobenzidine	ug/kg	1	0	1000	1000	INROS1	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	1	0	495	495	INROS1	495	NA
3-Nitroaniline	ug/kg	1	0	2550	2550	INROS1	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	1	0	2550	2550	INROS1	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	1	0	495	495	INROS1	495	NA
4-Chloro-3-methylphenol	ug/kg	1	0	495	495	INROS1	495	NA
4-Chloroaniline	ug/kg	1	0	1000	1000	INROS1	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	1	0	495	495	INROS1	495	NA
4-Nitroaniline	ug/kg	1	0	2550	2550	INROS1	2550	NA
4-Nitrophenol	ug/kg	1	0	2550	2550	INROS1	2550	NA
Acenaphthene	ug/kg	1	0	495	495	INROS1	495	NA
Acenaphthylene	ug/kg	1	0	495	495	INROS1	495	NA
Anthracene	ug/kg	1	0	495	495	INROS1	495	NA
Benzo(a)anthracene	ug/kg	1	0	495	495	INROS1	495	NA
Benzo(a)pyrene	ug/kg	1	0	495	495	INROS1	495	NA
Benzo(b)fluoranthene	ug/kg	1	0	495	495	INROS1	495	NA
Benzo(g,h,i)perylene	ug/kg	1	0	495	495	INROS1	495	NA
Benzo(k)fluoranthene	ug/kg	1	0	495	495	INROS1	495	NA
bis(2-Chloroethoxy)methane	ug/kg	1	0	495	495	INROS1	495	NA
bis(2-Chloroethyl)ether	ug/kg	1	0	495	495	INROS1	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	1	0	495	495	INROS1	495	NA
Butyl Benzyl Phthalate	ug/kg	1	0	495	495	INROS1	495	NA
Carbazole	ug/kg	1	0	495	495	INROS1	495	NA
Chrysene	ug/kg	1	0	495	495	INROS1	495	NA
Dibenzo(a,h)anthracene	ug/kg	1	0	495	495	INROS1	495	NA
Dibenzofuran	ug/kg	1	0	495	495	INROS1	495	NA
Diethyl Phthalate	ug/kg	1	0	495	495	INROS1	495	NA
Dimethyl Phthalate	ug/kg	1	0	495	495	INROS1	495	NA
Di-n-butylphthalate	ug/kg	1	0	495	495	INROS1	495	NA
Di-n-octylphthalate	ug/kg	1	0	495	495	INROS1	495	NA
Fluoranthene	ug/kg	1	0	495	495	INROS1	495	NA
Fluorene	ug/kg	1	0	495	495	INROS1	495	NA
Hexachlorobenzene	ug/kg	1	0	495	495	INROS1	495	NA
Hexachlorobutadiene	ug/kg	1	0	495	495	INROS1	495	NA
Hexachlorocyclopentadiene	ug/kg	1	0	495	495	INROS1	495	NA
Hexachloroethane	ug/kg	1	0	495	495	INROS1	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	1	0	495	495	INROS1	495	NA
Isophorone	ug/kg	1	0	495	495	INROS1	495	NA
Naphthalene	ug/kg	1	0	495	495	INROS1	495	NA
Nitrobenzene	ug/kg	1	0	495	495	INROS1	495	NA
N-Nitroso-di-n-propylamine	ug/kg	1	0	495	495	INROS1	495	NA
N-Nitrosodiphenylamine	ug/kg	1	0	495	495	INROS1	495	NA
Pentachlorophenol	ug/kg	1	0	26	26	INROS1	26	NA
Phenanthrene	ug/kg	1	0	495	495	INROS1	495	NA
Phenol	ug/kg	1	0	495	495	INROS1	495	NA
Pyrene	ug/kg	1	0	495	495	INROS1	495	NA

Table III-B5
Calculations for Risk Assessment Modeling
Sites O, R and S - Terrestrial Invertebrates
Sauget, IL

Analyte	Units	Sites O, R and S						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	1	0	5.0	5.0	INROS1	5.0	NA
4,4'-DDE	ug/kg	1	0	5.0	5.0	INROS1	5.0	NA
4,4'-DDT	ug/kg	1	0	5.0	5.0	INROS1	5.0	NA
Aldrin	ug/kg	1	1	1.9	1.9	INROS1	1.9	NA
alpha-BHC	ug/kg	1	0	2.6	2.6	INROS1	2.6	NA
alpha-Chlordane	ug/kg	1	0	2.6	2.6	INROS1	2.6	NA
beta-BHC	ug/kg	1	0	2.6	2.6	INROS1	2.6	NA
delta-BHC	ug/kg	1	1	1.5	1.5	INROS1	1.5	NA
Dieldrin	ug/kg	1	0	5.0	5.0	INROS1	5.0	NA
Endosulfan I	ug/kg	1	0	2.6	2.6	INROS1	2.6	NA
Endosulfan II	ug/kg	1	0	5.0	5.0	INROS1	5.0	NA
Endosulfan Sulfate	ug/kg	1	0	5.0	5.0	INROS1	5.0	NA
Endrin	ug/kg	1	0	5.0	5.0	INROS1	5.0	NA
Endrin Aldehyde	ug/kg	1	0	5.0	5.0	INROS1	5.0	NA
Endrin Ketone	ug/kg	1	1	4.2	4.2	INROS1	4.2	NA
gamma-BHC (Lindane)	ug/kg	1	1	1.5	1.5	INROS1	1.5	NA
gamma-Chlordane	ug/kg	1	1	1.6	1.6	INROS1	1.6	NA
Heptachlor	ug/kg	1	1	1.7	1.7	INROS1	1.7	NA
Heptachlor Epoxide	ug/kg	1	0	2.6	2.6	INROS1	2.6	NA
Methoxychlor	ug/kg	1	0	26	26	INROS1	26	NA
Toxaphene	ug/kg	1	0	255	255	INROS1	255	NA
Herbicides								
2,4-D	ug/kg	1	1	109	109	INROS1	109	NA
2,4-DB	ug/kg	1	1	20	20	INROS1	20	NA
2,4,5-T	ug/kg	1	0	13	13	INROS1	13	NA
2,4,5-TP (Silvex)	ug/kg	1	0	13	13	INROS1	13	NA
Dalapon	ug/kg	1	0	3000	3000	INROS1	3000	NA
Dicamba	ug/kg	1	0	30	30	INROS1	30	NA
Dichlorprop	ug/kg	1	0	150	150	INROS1	150	NA
Dinoseb	ug/kg	1	0	495	495	INROS1	495	NA
MCPA	ug/kg	1	0	3000	3000	INROS1	3000	NA
MCPP	ug/kg	1	0	3000	3000	INROS1	3000	NA
PCBs								
Total PCBs	ug/kg	1	0	25	25	INROS1	25	NA
Dioxins/Furans								
TEQ	pg/g	1	1	13	13	INROS1	13	NA
Metals								
Aluminum	mg/kg	1	1	15	15	INROS1	15	NA
Antimony	mg/kg	1	0	1.0	1.0	INROS1	1.0	NA
Arsenic	mg/kg	1	0	0.50	0.50	INROS1	0.50	NA
Barium	mg/kg	1	1	1.9	1.9	INROS1	1.9	NA
Beryllium	mg/kg	1	0	0.20	0.20	INROS1	0.20	NA
Cadmium	mg/kg	1	1	0.36	0.36	INROS1	0.36	NA
Calcium	mg/kg	1	1	450	450	INROS1	450	NA
Chromium	mg/kg	1	1	0.20	0.20	INROS1	0.20	NA
Cobalt	mg/kg	1	0	0.50	0.50	INROS1	0.50	NA
Copper	mg/kg	1	1	20	20	INROS1	20	NA
Iron	mg/kg	1	1	39	39	INROS1	39	NA
Lead	mg/kg	1	1	1.0	1.0	INROS1	1.0	NA
Magnesium	mg/kg	1	1	360	360	INROS1	360	NA
Manganese	mg/kg	1	1	5.5	5.5	INROS1	5.5	NA
Mercury	mg/kg	1	1	0.13	0.13	INROS1	0.13	NA
Nickel	mg/kg	1	0	2.0	2.0	INROS1	2.0	NA
Potassium	mg/kg	1	1	3800	3800	INROS1	3800	NA
Selenium	mg/kg	1	0	0.50	0.50	INROS1	0.50	NA
Silver	mg/kg	1	0	0.50	0.50	INROS1	0.50	NA
Sodium	mg/kg	1	1	330	330	INROS1	330	NA
Thallium	mg/kg	1	0	0.50	0.50	INROS1	0.50	NA
Vanadium	mg/kg	1	0	0.50	0.50	INROS1	0.50	NA
Zinc	mg/kg	1	1	56	56	INROS1	56	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B5
Calculations for Risk Assessment Modeling
Site Q - Terrestrial Invertebrates
Sauget, IL

Analyte	Units	Site Q						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	2	0	495	495	All	495	NA
1,2-Dichlorobenzene	ug/kg	2	0	495	495	All	495	NA
1,3-Dichlorobenzene	ug/kg	2	0	495	495	All	495	NA
1,4-Dichlorobenzene	ug/kg	2	0	495	495	All	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	2	0	495	495	All	495	NA
2,4,5-Trichlorophenol	ug/kg	2	0	495	495	All	495	NA
2,4,6-Trichlorophenol	ug/kg	2	0	495	495	All	495	NA
2,4-Dichlorophenol	ug/kg	2	0	495	495	All	495	NA
2,4-Dinitrophenol	ug/kg	2	0	2550	2550	All	2550	NA
2,4-Dinitrotoluene	ug/kg	2	0	495	495	All	495	NA
2,6-Dinitrotoluene	ug/kg	2	0	495	495	All	495	NA
2-Chloronaphthalene	ug/kg	2	0	495	495	All	495	NA
2-Chlorophenol	ug/kg	2	0	495	495	All	495	NA
2-Methylnaphthalene	ug/kg	2	0	495	495	All	495	NA
2-Methylphenol (o-Cresol)	ug/kg	2	0	495	495	All	495	NA
2-Nitroaniline	ug/kg	2	0	2550	2550	All	2550	NA
2-Nitrophenol	ug/kg	2	0	495	495	All	495	NA
3,3'-Dichlorobenzidine	ug/kg	2	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	2	0	495	495	All	495	NA
3-Nitroaniline	ug/kg	2	0	2550	2550	All	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	2	0	2550	2550	All	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	2	0	495	495	All	495	NA
4-Chloro-3-methylphenol	ug/kg	2	0	495	495	All	495	NA
4-Chloroaniline	ug/kg	2	0	1000	1000	All	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	2	0	495	495	All	495	NA
4-Nitroaniline	ug/kg	2	0	2550	2550	All	2550	NA
4-Nitrophenol	ug/kg	2	0	2550	2550	All	2550	NA
Acenaphthene	ug/kg	2	0	495	495	All	495	NA
Acenaphthylene	ug/kg	2	0	495	495	All	495	NA
Anthracene	ug/kg	2	0	495	495	All	495	NA
Benzo(a)anthracene	ug/kg	2	0	495	495	All	495	NA
Benzo(a)pyrene	ug/kg	2	0	495	495	All	495	NA
Benzo(b)fluoranthene	ug/kg	2	0	495	495	All	495	NA
Benzo(g,h,i)perylene	ug/kg	2	0	495	495	All	495	NA
Benzo(k)fluoranthene	ug/kg	2	0	495	495	All	495	NA
bis(2-Chloroethoxy)methane	ug/kg	2	0	495	495	All	495	NA
bis(2-Chloroethyl)ether	ug/kg	2	0	495	495	All	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	2	0	495	495	All	495	NA
Butyl Benzyl Phthalate	ug/kg	2	0	495	495	All	495	NA
Carbazole	ug/kg	2	0	495	495	All	495	NA
Chrysene	ug/kg	2	0	495	495	All	495	NA
Dibenzo(a,h)anthracene	ug/kg	2	0	495	495	All	495	NA
Dibenzofuran	ug/kg	2	0	495	495	All	495	NA
Diethyl Phthalate	ug/kg	2	0	495	495	All	495	NA
Dimethyl Phthalate	ug/kg	2	0	495	495	All	495	NA
Di-n-butylphthalate	ug/kg	2	0	495	495	All	495	NA
Di-n-octylphthalate	ug/kg	2	0	495	495	All	495	NA
Fluoranthene	ug/kg	2	0	495	495	All	495	NA
Fluorene	ug/kg	2	0	495	495	All	495	NA
Hexachlorobenzene	ug/kg	2	0	495	495	All	495	NA
Hexachlorobutadiene	ug/kg	2	0	495	495	All	495	NA
Hexachlorocyclopentadiene	ug/kg	2	0	495	495	All	495	NA
Hexachloroethane	ug/kg	2	0	495	495	All	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	2	0	495	495	All	495	NA
Isophorone	ug/kg	2	0	495	495	All	495	NA
Naphthalene	ug/kg	2	0	495	495	All	495	NA
Nitrobenzene	ug/kg	2	0	495	495	All	495	NA
N-Nitroso-di-n-propylamine	ug/kg	2	0	495	495	All	495	NA
N-Nitrosodiphenylamine	ug/kg	2	0	495	495	All	495	NA
Pentachlorophenol	ug/kg	2	0	26	26	All	26	NA
Phenanthrene	ug/kg	2	0	495	495	All	495	NA
Phenol	ug/kg	2	0	495	495	All	495	NA
Pyrene	ug/kg	2	0	495	495	All	495	NA

Table III-B5
Calculations for Risk Assessment Modeling
Site Q - Terrestrial Invertebrates
Sauget, IL

Analyte	Units	Site Q						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	2	1	5.0	5.0	All	5.0	NA
4,4'-DDE	ug/kg	2	0	5.0	5.0	All	5.0	NA
4,4'-DDT	ug/kg	2	0	5.0	5.0	All	5.0	NA
Aldrin	ug/kg	2	1	1.2	2.6	INQ1	1.9	NA
alpha-BHC	ug/kg	2	0	2.6	2.6	All	2.6	NA
alpha-Chlordane	ug/kg	2	0	2.6	2.6	All	2.6	NA
beta-BHC	ug/kg	2	0	2.6	2.6	All	2.6	NA
delta-BHC	ug/kg	2	1	0.44	2.6	INQ2	1.5	NA
Dieldrin	ug/kg	2	0	5.0	5.0	All	5.0	NA
Endosulfan I	ug/kg	2	0	2.6	2.6	All	2.6	NA
Endosulfan II	ug/kg	2	0	5.0	5.0	All	5.0	NA
Endosulfan Sulfate	ug/kg	2	0	5.0	5.0	All	5.0	NA
Endrin	ug/kg	2	0	5.0	5.0	All	5.0	NA
Endrin Aldehyde	ug/kg	2	0	5.0	5.0	All	5.0	NA
Endrin Ketone	ug/kg	2	1	3.4	5.0	INQ1	4.2	NA
gamma-BHC (Lindane)	ug/kg	2	1	0.43	2.6	INQ1	1.5	NA
gamma-Chlordane	ug/kg	2	1	0.64	2.6	INQ1	1.6	NA
Heptachlor	ug/kg	2	1	0.93	2.6	INQ1	1.7	NA
Heptachlor Epoxide	ug/kg	2	0	2.6	2.6	All	2.6	NA
Methoxychlor	ug/kg	2	0	26	26	All	26	NA
Toxaphene	ug/kg	2	0	255	255	All	255	NA
Herbicides								
2,4-D	ug/kg	2	2	68	150	INQ1	109	NA
2,4-DB	ug/kg	2	1	13	28	INQ1	20	NA
2,4,5-T	ug/kg	2	0	13	13	All	13	NA
2,4,5-TP (Silvex)	ug/kg	2	0	13	13	All	13	NA
Dalapon	ug/kg	2	0	3000	3000	All	3000	NA
Dicamba	ug/kg	2	0	30	30	All	30	NA
Dichlorprop	ug/kg	2	0	150	150	All	150	NA
Dinoseb	ug/kg	2	0	495	495	All	495	NA
MCPA	ug/kg	2	0	3000	3000	All	3000	NA
MCPP	ug/kg	2	0	3000	3000	All	3000	NA
PCBs								
Total PCBs	pg/g	2	2	25	51	INQ2	38	NA
Dioxins/Furans								
TEQ	ug/kg	2	2	0.88	487	INQ2	244	NA
Metals								
Aluminum	mg/kg	2	2	31	35	INQ1	33	NA
Antimony	mg/kg	2	0	0.85	0.85	All	0.85	NA
Arsenic	mg/kg	2	0	0.42	0.42	All	0.42	NA
Barium	mg/kg	2	2	1.8	3.2	INQ1	2.5	NA
Beryllium	mg/kg	2	0	0.17	0.17	All	0.17	NA
Cadmium	mg/kg	2	2	0.12	1.6	INQ1	0.86	NA
Calcium	mg/kg	2	2	450	750	INQ1	600	NA
Chromium	mg/kg	2	2	0.16	0.19	INQ2	0.18	NA
Cobalt	mg/kg	2	0	0.42	0.42	All	0.42	NA
Copper	mg/kg	2	2	23	32	INQ1	28	NA
Iron	mg/kg	2	2	74	83	INQ2	79	NA
Lead	mg/kg	2	2	0.39	0.75	INQ2	0.57	NA
Magnesium	mg/kg	2	2	390	450	INQ1	420	NA
Manganese	mg/kg	2	2	6.1	26	INQ1	16	NA
Mercury	mg/kg	2	2	0.12	0.17	INQ2	0.15	NA
Nickel	mg/kg	2	0	1.7	1.7	All	1.7	NA
Potassium	mg/kg	2	2	3300	3500	INQ2	3400	NA
Selenium	mg/kg	2	0	0.42	0.42	All	0.42	NA
Silver	mg/kg	2	1	0.42	0.57	INQ1	0.49	NA
Sodium	mg/kg	2	2	280	290	INQ1	285	NA
Thallium	mg/kg	2	0	0.42	0.42	All	0.42	NA
Vanadium	mg/kg	2	0	0.42	0.42	All	0.42	NA
Zinc	mg/kg	2	2	48	57	INQ2	53	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B5
Calculations for Risk Assessment Modeling
Site-Wide - Terrestrial Invertebrates
Sauget, IL

Analyte	Units	Site-Wide						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	4	0	495	495	All	495	NA
1,2-Dichlorobenzene	ug/kg	4	0	495	495	All	495	NA
1,3-Dichlorobenzene	ug/kg	4	0	495	495	All	495	NA
1,4-Dichlorobenzene	ug/kg	4	0	495	495	All	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	4	0	495	495	All	495	NA
2,4,5-Trichlorophenol	ug/kg	4	0	495	495	All	495	NA
2,4,6-Trichlorophenol	ug/kg	4	0	495	495	All	495	NA
2,4-Dichlorophenol	ug/kg	4	0	495	495	All	495	NA
2,4-Dinitrophenol	ug/kg	4	0	2550	2550	All	2550	NA
2,4-Dinitrotoluene	ug/kg	4	0	495	495	All	495	NA
2,6-Dinitrotoluene	ug/kg	4	0	495	495	All	495	NA
2-Chloronaphthalene	ug/kg	4	0	495	495	All	495	NA
2-Chlorophenol	ug/kg	4	0	495	495	All	495	NA
2-Methylnaphthalene	ug/kg	4	0	495	495	All	495	NA
2-Methylphenol (o-Cresol)	ug/kg	4	0	495	495	All	495	NA
2-Nitroaniline	ug/kg	4	0	2550	2550	All	2550	NA
2-Nitrophenol	ug/kg	4	0	495	495	All	495	NA
3,3'-Dichlorobenzidine	ug/kg	4	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	4	0	495	495	All	495	NA
3-Nitroaniline	ug/kg	4	0	2550	2550	All	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	4	0	2550	2550	All	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	4	0	495	495	All	495	NA
4-Chloro-3-methylphenol	ug/kg	4	0	495	495	All	495	NA
4-Chloroaniline	ug/kg	4	0	1000	1000	All	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	4	0	495	495	All	495	NA
4-Nitroaniline	ug/kg	4	0	2550	2550	All	2550	NA
4-Nitrophenol	ug/kg	4	0	2550	2550	All	2550	NA
Acenaphthene	ug/kg	4	0	495	495	All	495	NA
Acenaphthylene	ug/kg	4	0	495	495	All	495	NA
Anthracene	ug/kg	4	0	495	495	All	495	NA
Benzo(a)anthracene	ug/kg	4	0	495	495	All	495	NA
Benzo(a)pyrene	ug/kg	4	0	495	495	All	495	NA
Benzo(b)fluoranthene	ug/kg	4	0	495	495	All	495	NA
Benzo(g,h,i)perylene	ug/kg	4	0	495	495	All	495	NA
Benzo(k)fluoranthene	ug/kg	4	0	495	495	All	495	NA
bis(2-Chloroethoxy)methane	ug/kg	4	0	495	495	All	495	NA
bis(2-Chloroethyl)ether	ug/kg	4	0	495	495	All	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	4	0	495	495	All	495	NA
Butyl Benzyl Phthalate	ug/kg	4	0	495	495	All	495	NA
Carbazole	ug/kg	4	0	495	495	All	495	NA
Chrysene	ug/kg	4	0	495	495	All	495	NA
Dibenzo(a,h)anthracene	ug/kg	4	0	495	495	All	495	NA
Dibenzofuran	ug/kg	4	0	495	495	All	495	NA
Diethyl Phthalate	ug/kg	4	0	495	495	All	495	NA
Dimethyl Phthalate	ug/kg	4	0	495	495	All	495	NA
Di-n-butylphthalate	ug/kg	4	0	495	495	All	495	NA
Di-n-octylphthalate	ug/kg	4	0	495	495	All	495	NA
Fluoranthene	ug/kg	4	0	495	495	All	495	NA
Fluorene	ug/kg	4	0	495	495	All	495	NA
Hexachlorobenzene	ug/kg	4	0	495	495	All	495	NA
Hexachlorobutadiene	ug/kg	4	0	495	495	All	495	NA
Hexachlorocyclopentadiene	ug/kg	4	0	495	495	All	495	NA
Hexachloroethane	ug/kg	4	0	495	495	All	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	4	0	495	495	All	495	NA
Isophorone	ug/kg	4	0	495	495	All	495	NA
Naphthalene	ug/kg	4	0	495	495	All	495	NA
Nitrobenzene	ug/kg	4	0	495	495	All	495	NA
N-Nitroso-di-n-propylamine	ug/kg	4	0	495	495	All	495	NA
N-Nitrosodiphenylamine	ug/kg	4	0	495	495	All	495	NA
Pentachlorophenol	ug/kg	4	0	26	26	All	26	NA
Phenanthrene	ug/kg	4	0	495	495	All	495	NA
Phenol	ug/kg	4	0	495	495	All	495	NA
Pyrene	ug/kg	4	0	495	495	All	495	NA

Table III-B5
Calculations for Risk Assessment Modeling
Site-Wide - Terrestrial Invertebrates
Sauget, IL

Analyte	Units	Site-Wide						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	4	0	5.0	5.0	All	5.0	NA
4,4'-DDE	ug/kg	4	0	5.0	5.0	All	5.0	NA
4,4'-DDT	ug/kg	4	0	5.0	5.0	All	5.0	NA
Aldrin	ug/kg	4	3	1.2	2.6	INQ1	1.9	NA
alpha-BHC	ug/kg	4	0	2.6	2.6	All	2.6	NA
alpha-Chlordane	ug/kg	4	0	2.6	2.6	All	2.6	NA
beta-BHC	ug/kg	4	0	2.6	2.6	All	2.6	NA
delta-BHC	ug/kg	4	3	0.44	2.6	INQ2	1.5	NA
Dieldrin	ug/kg	4	0	5.0	5.0	All	5.0	NA
Endosulfan I	ug/kg	4	0	2.6	2.6	All	2.6	NA
Endosulfan II	ug/kg	4	0	5.0	5.0	All	5.0	NA
Endosulfan Sulfate	ug/kg	4	0	5.0	5.0	All	5.0	NA
Endrin	ug/kg	4	0	5.0	5.0	All	5.0	NA
Endrin Aldehyde	ug/kg	4	0	5.0	5.0	All	5.0	NA
Endrin Ketone	ug/kg	4	3	3.4	5.0	INQ1	4.2	NA
gamma-BHC (Lindane)	ug/kg	4	3	0.43	2.6	INQ1	1.5	NA
gamma-Chlordane	ug/kg	4	3	0.64	2.6	INQ1	1.6	NA
Heptachlor	ug/kg	4	3	0.93	2.6	INQ2	1.7	NA
Heptachlor Epoxide	ug/kg	4	0	2.6	2.6	All	2.6	NA
Methoxychlor	ug/kg	4	0	26	26	All	26	NA
Toxaphene	ug/kg	4	0	255	255	All	255	NA
Herbicides								
2,4-D	ug/kg	4	4	68	150	INQ1	109	NA
2,4-DB	ug/kg	4	3	13	28	INQ1	20	NA
2,4,5-T	ug/kg	4	0	13	13	All	13	NA
2,4,5-TP (Silvex)	ug/kg	4	0	13	13	All	13	NA
Dalapon	ug/kg	4	0	3000	3000	All	3000	NA
Dicamba	ug/kg	4	0	30	30	All	30	NA
Dichlorprop	ug/kg	4	0	150	150	All	150	NA
Dinoseb	ug/kg	4	0	495	495	All	495	NA
MCPA	ug/kg	4	0	3000	3000	All	3000	NA
MCPP	ug/kg	4	0	3000	3000	All	3000	NA
PCBs								
Total PCBs	ug/kg	4	1	25	51	INQ2	32	NA
Dioxins/Furans								
TEQ	pg/g	4	4	0.88	487	INQ2	126	NA
Metals								
Aluminum	mg/kg	4	4	15	35	INQ1	24	NA
Antimony	mg/kg	4	0	0.85	1.0	INROS1	0.90	NA
Arsenic	mg/kg	4	0	0.42	0.50	INROS1	0.45	NA
Barium	mg/kg	4	4	1.8	3.2	INQ1	2.2	NA
Beryllium	mg/kg	4	0	0.17	0.20	INROS1	0.18	NA
Cadmium	mg/kg	4	4	0.12	1.6	INQ1	0.72	NA
Calcium	mg/kg	4	4	450	750	INQ1	598	NA
Chromium	mg/kg	4	4	0.16	0.21	INP1	0.19	NA
Cobalt	mg/kg	4	0	0.42	0.50	INROS1	0.45	NA
Copper	mg/kg	4	4	14	32	INQ1	22	NA
Iron	mg/kg	4	4	39	83	INQ2	60	NA
Lead	mg/kg	4	4	0.39	2.0	INP1	1.0	NA
Magnesium	mg/kg	4	4	360	450	INQ1	395	NA
Manganese	mg/kg	4	4	4.5	26	INQ1	11	NA
Mercury	mg/kg	4	4	0.12	0.18	INP1	0.15	NA
Nickel	mg/kg	4	0	1.7	2.0	INROS1	1.8	NA
Potassium	mg/kg	4	4	3300	3800	INROS1	3500	NA
Selenium	mg/kg	4	0	0.42	1.3	INP1	0.66	NA
Silver	mg/kg	4	1	0.42	0.57	INQ1	0.49	NA
Sodium	mg/kg	4	4	280	360	INP1	315	NA
Thallium	mg/kg	4	0	0.42	0.50	INROS1	0.45	NA
Vanadium	mg/kg	4	0	0.42	0.50	INROS1	0.45	NA
Zinc	mg/kg	4	4	48	87	INP1	62	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B6
Calculations for Risk Assessment Modeling
2002 River Surface Water (Upstream - Plot 1 - A Line Only)
Sauget, IL

Analyte	Units	# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/L	3	0	0.50	0.50	All	0.50	NA
1,1,2,2-Tetrachloroethane	ug/L	3	0	0.50	0.50	All	0.50	NA
1,1,2-Trichloroethane	ug/L	3	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethane	ug/L	3	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethylene	ug/L	3	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethane	ug/L	3	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethene (total)	ug/L	3	0	1.0	1.0	All	1.0	NA
1,2-Dichloropropane	ug/L	3	0	0.50	0.50	All	0.50	NA
2-Butanone (MEK)	ug/L	3	0	5.0	5.0	All	5.0	NA
2-Hexanone	ug/L	3	0	5.0	5.0	All	5.0	NA
4-Methyl-2-pentanone (MIBK)	ug/L	3	0	5.0	5.0	All	5.0	NA
Acetone	ug/L	3	0	13	13	All	13	NA
Benzene	ug/L	3	0	0.50	0.50	All	0.50	NA
Bromodichloromethane	ug/L	3	0	0.50	0.50	All	0.50	NA
Bromoform	ug/L	3	0	0.50	0.50	All	0.50	NA
Bromomethane	ug/L	3	0	0.50	0.50	All	0.50	NA
Carbon Disulfide	ug/L	3	0	0.50	0.50	All	0.50	NA
Carbon Tetrachloride	ug/L	3	0	0.50	0.50	All	0.50	NA
Chlorobenzene	ug/L	3	0	0.50	0.50	All	0.50	NA
Chloroethane	ug/L	3	0	0.50	0.50	All	0.50	NA
Chloroform	ug/L	3	0	0.50	0.50	All	0.50	NA
Chloromethane	ug/L	3	0	0.25	0.50	R1AM1W/R1AU1W	0.42	NA
cis-1,3-Dichloropropene	ug/L	3	0	0.50	0.50	All	0.50	NA
Dibromochloromethane	ug/L	3	0	0.50	0.50	All	0.50	NA
Ethylbenzene	ug/L	3	0	0.50	0.50	All	0.50	NA
Methylene Chloride	ug/L	3	0	2.5	2.5	All	2.5	NA
Styrene (Monomer)	ug/L	3	0	0.50	0.50	All	0.50	NA
Tetrachloroethene	ug/L	3	0	0.50	0.50	All	0.50	NA
Toluene	ug/L	3	0	0.50	0.50	All	0.50	NA
trans-1,3-Dichloropropene	ug/L	3	0	0.50	0.50	All	0.50	NA
Trichloroethylene	ug/L	3	0	0.50	0.50	All	0.50	NA
Vinyl chloride	ug/L	3	0	0.50	0.50	All	0.50	NA
Xylenes, Total	ug/L	3	0	1.0	1.0	All	1.0	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/L	3	0	5.0	5.0	All	5.0	NA
1,2-Dichlorobenzene	ug/L	3	0	5.0	5.0	All	5.0	NA
1,3-Dichlorobenzene	ug/L	3	0	5.0	5.0	All	5.0	NA
1,4-Dichlorobenzene	ug/L	3	0	5.0	5.0	All	5.0	NA
2,2'-Oxybis(1-Chloropropane)	ug/L	3	0	5.0	5.0	All	5.0	NA
2,4,5-Trichlorophenol	ug/L	3	0	5.0	5.0	All	5.0	NA
2,4,6-Trichlorophenol	ug/L	3	0	5.0	5.0	All	5.0	NA
2,4-Dichlorophenol	ug/L	3	0	5.0	5.0	All	5.0	NA
2,4-Dimethylphenol	ug/L	3	0	5.0	5.0	All	5.0	NA
2,4-Dinitrophenol	ug/L	3	0	25	25	All	25	NA
2,4-Dinitrotoluene	ug/L	3	0	5.0	5.0	All	5.0	NA
2,6-Dinitrotoluene	ug/L	3	0	5.0	5.0	All	5.0	NA
2-Chloronaphthalene	ug/L	3	0	5.0	5.0	All	5.0	NA
2-Chlorophenol	ug/L	3	0	5.0	5.0	All	5.0	NA
2-Methylnaphthalene	ug/L	3	0	5.0	5.0	All	5.0	NA
2-Methylphenol (o-Cresol)	ug/L	3	0	5.0	5.0	All	5.0	NA
2-Nitroaniline	ug/L	3	0	25	25	All	25	NA
2-Nitrophenol	ug/L	3	0	5.0	5.0	All	5.0	NA
3,3'-Dichlorobenzidine	ug/L	3	0	10	10	All	10	NA
3/4-Methylphenol (m&p-Cresol)	ug/L	3	0	5.0	5.0	All	5.0	NA
3-Nitroaniline	ug/L	3	0	25	25	All	25	NA
4,6-Dinitro-2-methylphenol	ug/L	3	0	25	25	All	25	NA
4-Bromophenyl Phenyl Ether	ug/L	3	0	5.0	5.0	All	5.0	NA
4-Chloro-3-methylphenol	ug/L	3	0	5.0	5.0	All	5.0	NA
4-Chloroaniline	ug/L	3	0	10	10	All	10	NA
4-Chlorophenyl Phenyl Ether	ug/L	3	0	5.0	5.0	All	5.0	NA
4-Nitroaniline	ug/L	3	0	25	25	All	25	NA
4-Nitrophenol	ug/L	3	0	25	25	All	25	NA
Acenaphthene	ug/L	3	0	5.0	5.0	All	5.0	NA
Acenaphthylene	ug/L	3	0	5.0	5.0	All	5.0	NA
Anthracene	ug/L	3	0	5.0	5.0	All	5.0	NA

Table III-B6
Calculations for Risk Assessment Modeling
2002 River Surface Water (Upstream - Plot 1 - A Line Only)
Sauget, IL

Analyte	Units	# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/L	3	0	5.0	5.0	All	5.0	NA
Benzo(a)pyrene	ug/L	3	0	5.0	5.0	All	5.0	NA
Benzo(b)fluoranthene	ug/L	3	0	5.0	5.0	All	5.0	NA
Benzo(g,h,i)perylene	ug/L	3	0	5.0	5.0	All	5.0	NA
Benzo(k)fluoranthene	ug/L	3	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethoxy)methane	ug/L	3	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethyl)ether	ug/L	3	0	5.0	5.0	All	5.0	NA
bis(2-Ethylhexyl)phthalate	ug/L	3	0	5.0	5.0	All	5.0	NA
Butyl Benzyl Phthalate	ug/L	3	0	5.0	5.0	All	5.0	NA
Carbazole	ug/L	3	0	5.0	5.0	All	5.0	NA
Chrysene	ug/L	3	0	5.0	5.0	All	5.0	NA
Dibenzo(a,h)anthracene	ug/L	3	0	5.0	5.0	All	5.0	NA
Dibenzofuran	ug/L	3	0	5.0	5.0	All	5.0	NA
Diethyl Phthalate	ug/L	3	0	5.0	5.0	All	5.0	NA
Dimethyl Phthalate	ug/L	3	0	5.0	5.0	All	5.0	NA
Di-n-butylphthalate	ug/L	3	0	5.0	5.0	All	5.0	NA
Di-n-octylphthalate	ug/L	3	0	5.0	5.0	All	5.0	NA
Fluoranthene	ug/L	3	0	5.0	5.0	All	5.0	NA
Fluorene	ug/L	3	0	5.0	5.0	All	5.0	NA
Hexachlorobenzene	ug/L	3	0	5.0	5.0	All	5.0	NA
Hexachlorobutadiene	ug/L	3	0	5.0	5.0	All	5.0	NA
Hexachlorocyclopentadiene	ug/L	3	0	5.0	5.0	All	5.0	NA
Hexachloroethane	ug/L	3	0	5.0	5.0	All	5.0	NA
Indeno(1,2,3-cd)pyrene	ug/L	3	0	5.0	5.0	All	5.0	NA
Isophorone	ug/L	3	0	5.0	5.0	All	5.0	NA
Naphthalene	ug/L	3	0	5.0	5.0	All	5.0	NA
Nitrobenzene	ug/L	3	0	5.0	5.0	All	5.0	NA
N-Nitroso-di-n-propylamine	ug/L	3	0	5.0	5.0	All	5.0	NA
N-Nitrosodiphenylamine	ug/L	3	0	5.0	5.0	All	5.0	NA
Pentachlorophenol	ug/L	3	0	0.50	0.50	All	0.50	NA
Phenanthrene	ug/L	3	0	5.0	5.0	All	5.0	NA
Phenol	ug/L	3	0	5.0	5.0	All	5.0	NA
Pyrene	ug/L	3	0	5.0	5.0	All	5.0	NA
Pesticides								
4,4'-DDD	ug/L	3	0	0.050	0.050	All	0.050	NA
4,4'-DDE	ug/L	3	0	0.050	0.050	All	0.050	NA
4,4'-DDT	ug/L	3	0	0.050	0.050	All	0.050	NA
Aldrin	ug/L	3	0	0.025	0.025	All	0.025	NA
alpha-BHC	ug/L	3	0	0.025	0.025	All	0.025	NA
alpha-Chlordane	ug/L	3	0	0.025	0.025	All	0.025	NA
beta-BHC	ug/L	3	0	0.025	0.025	All	0.025	NA
delta-BHC	ug/L	3	0	0.025	0.025	All	0.025	NA
Dieldrin	ug/L	3	0	0.050	0.050	All	0.050	NA
Endosulfan I	ug/L	3	0	0.025	0.025	All	0.025	NA
Endosulfan II	ug/L	3	0	0.050	0.050	All	0.050	NA
Endosulfan Sulfate	ug/L	3	0	0.050	0.050	All	0.050	NA
Endrin	ug/L	3	0	0.050	0.050	All	0.050	NA
Endrin Aldehyde	ug/L	3	0	0.050	0.050	All	0.050	NA
Endrin Ketone	ug/L	3	2	0.015	0.050	R1AM1W	0.030	NA
gamma-BHC (Lindane)	ug/L	3	0	0.025	0.025	All	0.025	NA
gamma-Chlordane	ug/L	3	0	0.025	0.025	All	0.025	NA
Heptachlor	ug/L	3	0	0.025	0.025	All	0.025	NA
Heptachlor Epoxide	ug/L	3	0	0.025	0.025	All	0.025	NA
Methoxychlor	ug/L	3	0	0.25	0.25	All	0.25	NA
Toxaphene	ug/L	3	0	2.5	2.5	All	2.5	NA
Herbicides								
2,4-D	ug/L	3	0	0.25	0.25	All	0.25	NA
2,4-DB	ug/L	3	0	0.25	0.25	All	0.25	NA
2,4,5-T	ug/L	3	0	0.25	0.25	All	0.25	NA
2,4,5-TP (Silvex)	ug/L	3	0	0.25	0.25	All	0.25	NA
Dalapon	ug/L	3	0	60	60	All	60	NA
Dicamba	ug/L	3	0	0.60	0.60	All	0.60	NA
Dichlorprop	ug/L	3	0	3.0	3.0	All	3.0	NA
Dinoseb	ug/L	3	0	5.0	5.0	All	5.0	NA
MCPA	ug/L	3	0	60	60	All	60	NA
MCPP	ug/L	3	0	60	60	All	60	NA

Table III-B6
Calculations for Risk Assessment Modeling
2002 River Surface Water (Upstream - Plot 1 - A Line Only)
Sauget, IL

Analyte	Units	# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/L	3	0	0.25	0.25	All	0.25	NA
Dioxins/Furans (a)								
TEQ	ug/L	2	0	0.0000016	0.0000026	R1BM2W	0.0000021	NA
Metals (total)								
Aluminum	mg/L	3	3	0.58	0.79	R1AD1W	0.66	NA
Antimony	mg/L	3	0	0.010	0.010	All	0.010	NA
Arsenic	mg/L	3	0	0.0050	0.0050	All	0.0050	NA
Barium	mg/L	3	3	0.055	0.060	R1AD1W/R1AM1W	0.058	NA
Beryllium	mg/L	3	0	0.0020	0.0020	All	0.0020	NA
Cadmium	mg/L	3	0	0.0025	0.0025	All	0.0025	NA
Calcium	mg/L	3	3	49	53	R1AM1W	51	NA
Chromium	mg/L	3	0	0.0050	0.0050	All	0.0050	NA
Cobalt	mg/L	3	1	0.0011	0.0050	R1AD1W/R1AU1W	0.0037	NA
Copper	mg/L	3	0	0.010	0.010	All	0.010	NA
Iron	mg/L	3	3	0.83	1.1	R1AD1W	0.94	NA
Lead	mg/L	3	0	0.0025	0.0025	All	0.0025	NA
Magnesium	mg/L	3	3	20	21	R1AD1W/R1AM1W	21	NA
Manganese	mg/L	3	3	0.078	0.084	R1AM1W	0.081	NA
Mercury	mg/L	3	0	0.00010	0.00010	All	0.00010	NA
Nickel	mg/L	3	0	0.020	0.020	All	0.020	NA
Potassium	mg/L	3	3	3.2	3.5	R1AD1W/R1AM1W	3.4	NA
Selenium	mg/L	3	0	0.0050	0.0050	All	0.0050	NA
Silver	mg/L	3	0	0.0050	0.0050	All	0.0050	NA
Sodium	mg/L	3	3	17	19	R1AD1W/R1AM1W	18	NA
Thallium	mg/L	3	0	0.0050	0.0050	All	0.0050	NA
Vanadium	mg/L	3	0	0.0050	0.0050	All	0.0050	NA
Zinc	mg/L	3	0	0.010	0.010	All	0.010	NA

NOTES:
a = Dioxins/furans were not analyzed for the A-Line river samples. Therefore, the B-Line sample set was used.
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B6
Calculations for Risk Assessment Modeling
2002 River Surface Water (Adjacent - All Near Shore Sample Locations Except Plots 1 and 6)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Near Shore Sample Locations Except Plots 1 and 6)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/L	14	0	0.50	0.50	All	0.50	NA
1,1,2,2-Tetrachloroethane	ug/L	14	0	0.50	0.50	All	0.50	NA
1,1,2-Trichloroethane	ug/L	14	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethane	ug/L	14	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethylene	ug/L	14	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethane	ug/L	14	6	0.13	0.70	R3AU1W	0.43	NA
1,2-Dichloroethene (total)	ug/L	14	1	0.24	1.0	All (except R3AU1W)	0.95	NA
1,2-Dichloropropane	ug/L	14	0	0.50	0.50	All	0.50	NA
2-Butanone (MEK)	ug/L	14	0	5.0	5.0	All	5.0	NA
2-Hexanone	ug/L	14	0	5.0	5.0	All	5.0	NA
4-Methyl-2-pentanone (MIBK)	ug/L	14	1	3.8	5.0	All (except R3AU1W)	4.9	NA
Acetone	ug/L	14	1	13	40	R4AU1W	14	NA
Benzene	ug/L	14	6	0.26	4.5	R3AU1W	0.74	NA
Bromodichloromethane	ug/L	14	0	0.50	0.50	All	0.50	NA
Bromoform	ug/L	14	0	0.50	0.50	All	0.50	NA
Bromomethane	ug/L	13	0	0.50	0.50	All	0.50	NA
Carbon Disulfide	ug/L	14	2	0.28	0.50	Various	0.47	NA
Carbon Tetrachloride	ug/L	14	1	0.17	0.50	All (except R3AU1W)	0.48	NA
Chlorobenzene	ug/L	14	10	0.50	56	R3AU1W	5.9	NA
Chloroethane	ug/L	14	0	0.50	0.50	All	0.50	NA
Chloroform	ug/L	14	0	0.50	0.50	All	0.50	NA
Chloromethane	ug/L	14	4	0.20	0.96	R4AU1W	0.50	NA
cis-1,3-Dichloropropene	ug/L	14	0	0.50	0.50	All	0.50	NA
Dibromochloromethane	ug/L	14	0	0.50	0.50	All	0.50	NA
Ethylbenzene	ug/L	14	1	0.50	1.3	R3AU1W	0.56	NA
Methylene Chloride	ug/L	14	0	2.5	2.5	All	2.5	NA
Styrene (Monomer)	ug/L	14	0	0.50	0.50	All	0.50	NA
Tetrachloroethene	ug/L	14	0	0.50	0.50	All	0.50	NA
Toluene	ug/L	14	4	0.50	4.5	R3AU1W	0.81	NA
trans-1,3-Dichloropropene	ug/L	14	0	0.50	0.50	All	0.50	NA
Trichloroethylene	ug/L	14	0	0.50	0.50	All	0.50	NA
Vinyl chloride	ug/L	14	0	0.50	0.50	All	0.50	NA
Xylenes, Total	ug/L	14	1	1.0	3.0	R3AU1W	1.1	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/L	14	0	5.0	5.0	All	5.0	NA
1,2-Dichlorobenzene	ug/L	14	1	5.0	40	R3AU1W	7.5	NA
1,3-Dichlorobenzene	ug/L	14	0	5.0	5.0	All	5.0	NA
1,4-Dichlorobenzene	ug/L	14	1	3.9	5.0	All (except R3AU1W)	4.9	NA
2,2'-Oxybis(1-Chloropropane)	ug/L	14	0	5.0	5.0	All	5.0	NA
2,4,5-Trichlorophenol	ug/L	14	0	5.0	5.0	All	5.0	NA
2,4,6-Trichlorophenol	ug/L	14	1	5.0	17	R3AU1W	5.9	NA
2,4-Dichlorophenol	ug/L	14	7	1.2	69	R3AU1W	8.3	NA
2,4-Dimethylphenol	ug/L	14	1	5.0	8.3	R3AU1W	5.2	NA
2,4-Dinitrophenol	ug/L	14	0	25	25	All	25	NA
2,4-Dinitrotoluene	ug/L	14	0	5.0	5.0	All	5.0	NA
2,6-Dinitrotoluene	ug/L	14	0	5.0	5.0	All	5.0	NA
2-Chloronaphthalene	ug/L	14	0	5.0	5.0	All	5.0	NA
2-Chlorophenol	ug/L	14	5	1.4	31	R3AU1W	5.9	NA
2-Methylnaphthalene	ug/L	14	0	5.0	5.0	All	5.0	NA
2-Methylphenol (o-Cresol)	ug/L	14	0	5.0	5.0	All	5.0	NA
2-Nitroaniline	ug/L	14	0	25	25	All	25	NA
2-Nitrophenol	ug/L	14	0	5.0	5.0	All	5.0	NA
3,3'-Dichlorobenzidine	ug/L	14	0	10	10	All	10	NA
3/4-Methylphenol (m&p-Cresol)	ug/L	14	1	5.0	27	R3AU1W	6.6	NA
3-Nitroaniline	ug/L	14	0	25	25	All	25	NA
4,6-Dinitro-2-methylphenol	ug/L	14	0	25	25	All	25	NA
4-Bromophenyl Phenyl Ether	ug/L	14	0	5.0	5.0	All	5.0	NA
4-Chloro-3-methylphenol	ug/L	14	0	5.0	5.0	All	5.0	NA
4-Chloroaniline	ug/L	14	9	1.4	160	R3AU1W	18	NA
4-Chlorophenyl Phenyl Ether	ug/L	14	0	5.0	5.0	All	5.0	NA
4-Nitroaniline	ug/L	14	0	25	25	All	25	NA
4-Nitrophenol	ug/L	14	0	25	25	All	25	NA
Acenaphthene	ug/L	14	0	5.0	5.0	All	5.0	NA
Acenaphthylene	ug/L	14	0	5.0	5.0	All	5.0	NA
Anthracene	ug/L	14	0	5.0	5.0	All	5.0	NA

Table III-B6
Calculations for Risk Assessment Modeling
2002 River Surface Water (Adjacent - All Near Shore Sample Locations Except Plots 1 and 6)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Near Shore Sample Locations Except Plots 1 and 6)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/L	14	0	5.0	5.0	All	5.0	NA
Benzo(a)pyrene	ug/L	14	0	5.0	5.0	All	5.0	NA
Benzo(b)fluoranthene	ug/L	14	0	5.0	5.0	All	5.0	NA
Benzo(g,h,i)perylene	ug/L	14	0	5.0	5.0	All	5.0	NA
Benzo(k)fluoranthene	ug/L	14	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethoxy)methane	ug/L	14	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethyl)ether	ug/L	14	0	5.0	5.0	All	5.0	NA
bis(2-Ethylhexyl)phthalate	ug/L	14	0	5.0	5.0	All	5.0	NA
Butyl Benzyl Phthalate	ug/L	14	0	5.0	5.0	All	5.0	NA
Carbazole	ug/L	14	0	5.0	5.0	All	5.0	NA
Chrysene	ug/L	14	0	5.0	5.0	All	5.0	NA
Dibenzo(a,h)anthracene	ug/L	14	0	5.0	5.0	All	5.0	NA
Dibenzofuran	ug/L	14	0	5.0	5.0	All	5.0	NA
Diethyl Phthalate	ug/L	14	0	5.0	5.0	All	5.0	NA
Dimethyl Phthalate	ug/L	14	0	5.0	5.0	All	5.0	NA
Di-n-butylphthalate	ug/L	14	0	5.0	5.0	All	5.0	NA
Di-n-octylphthalate	ug/L	14	0	5.0	5.0	All	5.0	NA
Fluoranthene	ug/L	14	0	5.0	5.0	All	5.0	NA
Fluorene	ug/L	14	0	5.0	5.0	All	5.0	NA
Hexachlorobenzene	ug/L	14	0	5.0	5.0	All	5.0	NA
Hexachlorobutadiene	ug/L	14	0	5.0	5.0	All	5.0	NA
Hexachlorocyclopentadiene	ug/L	14	0	5.0	5.0	All	5.0	NA
Hexachloroethane	ug/L	14	0	5.0	5.0	All	5.0	NA
Indeno(1,2,3-cd)pyrene	ug/L	14	0	5.0	5.0	All	5.0	NA
Isophorone	ug/L	14	0	5.0	5.0	All	5.0	NA
Naphthalene	ug/L	14	1	5.0	21	R3AU1W	6.1	NA
Nitrobenzene	ug/L	14	1	2.5	5.0	All (except R3AU1W)	4.8	NA
N-Nitroso-di-n-propylamine	ug/L	14	0	5.0	5.0	All	5.0	NA
N-Nitrosodiphenylamine	ug/L	14	0	5.0	5.0	All	5.0	NA
Pentachlorophenol	ug/L	14	1	0.50	1.9	R3AU1W	0.60	NA
Phenanthrene	ug/L	14	0	5.0	5.0	All	5.0	NA
Phenol	ug/L	14	5	5.0	12	R3AM1W	6.1	NA
Pyrene	ug/L	14	0	5.0	5.0	All	5.0	NA
Pesticides								
4,4'-DDD	ug/L	14	0	0.050	0.050	All	0.050	NA
4,4'-DDE	ug/L	14	0	0.050	0.050	All	0.050	NA
4,4'-DDT	ug/L	14	0	0.050	0.050	All	0.050	NA
Aldrin	ug/L	14	0	0.025	0.025	All	0.025	NA
alpha-BHC	ug/L	14	0	0.025	0.025	All	0.025	NA
alpha-Chlordane	ug/L	14	0	0.025	0.025	All	0.025	NA
beta-BHC	ug/L	14	1	0.0092	0.025	All (except R3AD1W)	0.024	NA
delta-BHC	ug/L	14	0	0.025	0.025	All	0.025	NA
Dieldrin	ug/L	14	0	0.050	0.050	All	0.050	NA
Endosulfan I	ug/L	14	0	0.025	0.025	All	0.025	NA
Endosulfan II	ug/L	14	0	0.050	0.050	All	0.050	NA
Endosulfan Sulfate	ug/L	14	0	0.050	0.050	All	0.050	NA
Endrin	ug/L	14	0	0.050	0.050	All	0.050	NA
Endrin Aldehyde	ug/L	14	0	0.050	0.050	All	0.050	NA
Endrin Ketone	ug/L	14	1	0.023	0.050	All (except R5AN1W)	0.048	NA
gamma-BHC (Lindane)	ug/L	14	0	0.025	0.025	All	0.025	NA
gamma-Chlordane	ug/L	14	0	0.025	0.025	All	0.025	NA
Heptachlor	ug/L	14	0	0.025	0.025	All	0.025	NA
Heptachlor Epoxide	ug/L	14	0	0.025	0.025	All	0.025	NA
Methoxychlor	ug/L	14	0	0.25	0.25	All	0.25	NA
Toxaphene	ug/L	14	0	2.5	2.5	All	2.5	NA
Herbicides								
2,4-D	ug/L	14	10	0.25	29	R3AU1W	3.6	NA
2,4-DB	ug/L	14	0	0.25	0.25	All	0.25	NA
2,4,5-T	ug/L	14	1	0.25	0.30	R3AU1W	0.25	NA
2,4,5-TP (Silvex)	ug/L	14	0	0.25	0.25	All	0.25	NA
Dalapon	ug/L	14	0	60	60	All	60	NA
Dicamba	ug/L	14	0	0.60	0.60	All	0.60	NA
Dichlorprop	ug/L	14	7	0.11	3.0	Various	1.9	NA
Dinoseb	ug/L	14	0	5.0	5.0	All	5.0	NA
MCPA	ug/L	14	0	60	60	All	60	NA
MCPP	ug/L	14	0	60	60	All	60	NA

Table III-B6
Calculations for Risk Assessment Modeling
2002 River Surface Water (Adjacent - All Near Shore Sample Locations Except Plots 1 and 6)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Near Shore Sample Locations Except Plots 1 and 6)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/L	14	0	0.25	0.25	All	0.25	NA
Dioxins/Furans (a)								
TEQ	ug/L	4	0	0.0000013	0.0000018	R5BM1W	0.0000017	NA
Metals (total)								
Aluminum	mg/L	14	14	0.39	1.0	R2AM2W	0.79	NA
Antimony	mg/L	14	0	0.010	0.010	All	0.010	NA
Arsenic	mg/L	14	2	0.0036	0.0061	R5AN1W	0.0050	NA
Barium	mg/L	14	14	0.058	0.065	R3AU1W/R4AM1W	0.062	NA
Beryllium	mg/L	14	0	0.0020	0.0020	All	0.0020	NA
Cadmium	mg/L	14	0	0.0025	0.0025	All	0.0025	NA
Calcium	mg/L	14	14	50	54	R3AD1W/R4AM1W	52	NA
Chromium	mg/L	14	0	0.0050	0.0050	All	0.0050	NA
Cobalt	mg/L	14	0	0.0050	0.0050	All	0.0050	NA
Copper	mg/L	14	0	0.0050	0.010	All	0.0096	NA
Iron	mg/L	14	14	0.68	1.4	R4AD1W	1.1	NA
Lead	mg/L	14	1	0.0025	0.0031	R4AU1W	0.0025	NA
Magnesium	mg/L	14	14	19	22	R3AD1W	21	NA
Manganese	mg/L	14	14	0.083	0.14	R3AU1W	0.094	NA
Mercury	mg/L	14	1	0.00010	0.00014	R5AM1W	0.00010	NA
Nickel	mg/L	14	0	0.020	0.020	All	0.020	NA
Potassium	mg/L	14	14	3.3	3.7	R3AD1W	3.5	NA
Selenium	mg/L	14	0	0.0050	0.0050	All	0.0050	NA
Silver	mg/L	14	0	0.0050	0.0050	All	0.0050	NA
Sodium	mg/L	14	14	19	24	R3AU1W	21	NA
Thallium	mg/L	14	0	0.0050	0.0050	All	0.0050	NA
Vanadium	mg/L	14	1	0.0034	0.0050	All (except R5AN1W)	0.0049	NA
Zinc	mg/L	14	4	0.0042	0.010	Various	0.0087	NA

NOTES:
a = Dioxins/furans were not analyzed for the A-Line river samples. Therefore, the B-Line sample set was used.
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B6
Calculations for Risk Assessment Modeling
2002 River Surface Water (Downstream - Plot 6 - A Line Only)
Sauget, IL

Analyte	Units	Downstream River Surface Water (Plot 6-A-Line)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/L	4	0	0.50	0.50	All	0.50	NA
1,1,2,2-Tetrachloroethane	ug/L	4	0	0.50	0.50	All	0.50	NA
1,1,2-Trichloroethane	ug/L	4	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethane	ug/L	4	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethylene	ug/L	4	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethane	ug/L	4	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethene (total)	ug/L	4	0	1.0	1.0	All	1.0	NA
1,2-Dichloropropane	ug/L	4	0	0.50	0.50	All	0.50	NA
2-Butanone (MEK)	ug/L	4	0	5.0	5.0	All	5.0	NA
2-Hexanone	ug/L	4	0	5.0	5.0	All	5.0	NA
4-Methyl-2-pentanone (MIBK)	ug/L	4	0	5.0	5.0	All	5.0	NA
Acetone	ug/L	4	0	13	13	All	13	NA
Benzene	ug/L	4	2	0.21	0.50	R6AD1W/R6AU1W	0.39	NA
Bromodichloromethane	ug/L	4	0	0.50	0.50	All	0.50	NA
Bromoform	ug/L	4	0	0.50	0.50	All	0.50	NA
Bromomethane	ug/L	4	0	0.50	0.50	All	0.50	NA
Carbon Disulfide	ug/L	4	0	0.50	0.50	All	0.50	NA
Carbon Tetrachloride	ug/L	4	0	0.50	0.50	All	0.50	NA
Chlorobenzene	ug/L	4	3	0.50	2.3	R6AM1W	1.4	NA
Chloroethane	ug/L	4	0	0.50	0.50	All	0.50	NA
Chloroform	ug/L	4	0	0.50	0.50	All	0.50	NA
Chloromethane	ug/L	4	0	0.50	0.50	All	0.50	NA
cis-1,3-Dichloropropene	ug/L	4	0	0.50	0.50	All	0.50	NA
Dibromochloromethane	ug/L	4	0	0.50	0.50	All	0.50	NA
Ethylbenzene	ug/L	4	0	0.50	0.50	All	0.50	NA
Methylene Chloride	ug/L	4	0	2.5	2.5	All	2.5	NA
Styrene (Monomer)	ug/L	4	0	0.50	0.50	All	0.50	NA
Tetrachloroethene	ug/L	4	0	0.50	0.50	All	0.50	NA
Toluene	ug/L	4	1	0.45	0.50	All (except R6AM1W)	0.49	NA
trans-1,3-Dichloropropene	ug/L	4	0	0.50	0.50	All	0.50	NA
Trichloroethylene	ug/L	4	0	0.50	0.50	All	0.50	NA
Vinyl chloride	ug/L	4	0	0.50	0.50	All	0.50	NA
Xylenes, Total	ug/L	4	0	1.0	1.0	All	1.0	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/L	4	0	5.0	5.0	All	5.0	NA
1,2-Dichlorobenzene	ug/L	4	0	5.0	5.0	All	5.0	NA
1,3-Dichlorobenzene	ug/L	4	0	5.0	5.0	All	5.0	NA
1,4-Dichlorobenzene	ug/L	4	0	5.0	5.0	All	5.0	NA
2,2'-Oxybis(1-Chloropropane)	ug/L	4	0	5.0	5.0	All	5.0	NA
2,4,5-Trichlorophenol	ug/L	4	0	5.0	5.0	All	5.0	NA
2,4,6-Trichlorophenol	ug/L	4	0	5.0	5.0	All	5.0	NA
2,4-Dichlorophenol	ug/L	4	0	5.0	5.0	All	5.0	NA
2,4-Dimethylphenol	ug/L	4	0	5.0	5.0	All	5.0	NA
2,4-Dinitrophenol	ug/L	4	0	25	25	All	25	NA
2,4-Dinitrotoluene	ug/L	4	0	5.0	5.0	All	5.0	NA
2,6-Dinitrotoluene	ug/L	4	0	5.0	5.0	All	5.0	NA
2-Chloronaphthalene	ug/L	4	0	5.0	5.0	All	5.0	NA
2-Chlorophenol	ug/L	4	0	5.0	5.0	All	5.0	NA
2-Methylnaphthalene	ug/L	4	0	5.0	5.0	All	5.0	NA
2-Methylphenol (o-Cresol)	ug/L	4	0	5.0	5.0	All	5.0	NA
2-Nitroaniline	ug/L	4	0	25	25	All	25	NA
2-Nitrophenol	ug/L	4	0	5.0	5.0	All	5.0	NA
3,3'-Dichlorobenzidine	ug/L	4	0	10	10	All	10	NA
3/4-Methylphenol (m&p-Cresol)	ug/L	4	0	5.0	5.0	All	5.0	NA
3-Nitroaniline	ug/L	4	0	25	25	All	25	NA
4,6-Dinitro-2-methylphenol	ug/L	4	0	25	25	All	25	NA
4-Bromophenyl Phenyl Ether	ug/L	4	0	5.0	5.0	All	5.0	NA
4-Chloro-3-methylphenol	ug/L	4	0	5.0	5.0	All	5.0	NA
4-Chloroaniline	ug/L	4	0	10	10	All	10	NA
4-Chlorophenyl Phenyl Ether	ug/L	4	0	5.0	5.0	All	5.0	NA
4-Nitroaniline	ug/L	4	0	25	25	All	25	NA
4-Nitrophenol	ug/L	4	0	25	25	All	25	NA
Acenaphthene	ug/L	4	0	5.0	5.0	All	5.0	NA
Acenaphthylene	ug/L	4	0	5.0	5.0	All	5.0	NA
Anthracene	ug/L	4	0	5.0	5.0	All	5.0	NA

Table III-B6
Calculations for Risk Assessment Modeling
2002 River Surface Water (Downstream - Plot 6 - A Line Only)
Sauget, IL

Analyte	Units	Downstream River Surface Water (Plot 6-A-Line)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/L	4	0	5.0	5.0	All	5.0	NA
Benzo(a)pyrene	ug/L	4	0	5.0	5.0	All	5.0	NA
Benzo(b)fluoranthene	ug/L	4	0	5.0	5.0	All	5.0	NA
Benzo(g,h,i)perylene	ug/L	4	0	5.0	5.0	All	5.0	NA
Benzo(k)fluoranthene	ug/L	4	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethoxy)methane	ug/L	4	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethyl)ether	ug/L	4	0	5.0	5.0	All	5.0	NA
bis(2-Ethylhexyl)phthalate	ug/L	4	0	5.0	5.0	All	5.0	NA
Butyl Benzyl Phthalate	ug/L	4	0	5.0	5.0	All	5.0	NA
Carbazole	ug/L	4	0	5.0	5.0	All	5.0	NA
Chrysene	ug/L	4	0	5.0	5.0	All	5.0	NA
Dibenzo(a,h)anthracene	ug/L	4	0	5.0	5.0	All	5.0	NA
Dibenzofuran	ug/L	4	0	5.0	5.0	All	5.0	NA
Diethyl Phthalate	ug/L	4	0	5.0	5.0	All	5.0	NA
Dimethyl Phthalate	ug/L	4	0	5.0	5.0	All	5.0	NA
Di-n-butylphthalate	ug/L	4	0	5.0	5.0	All	5.0	NA
Di-n-octylphthalate	ug/L	4	0	5.0	5.0	All	5.0	NA
Fluoranthene	ug/L	4	0	5.0	5.0	All	5.0	NA
Fluorene	ug/L	4	0	5.0	5.0	All	5.0	NA
Hexachlorobenzene	ug/L	4	0	5.0	5.0	All	5.0	NA
Hexachlorobutadiene	ug/L	4	0	5.0	5.0	All	5.0	NA
Hexachlorocyclopentadiene	ug/L	4	0	5.0	5.0	All	5.0	NA
Hexachloroethane	ug/L	4	0	5.0	5.0	All	5.0	NA
Indeno(1,2,3-cd)pyrene	ug/L	4	0	5.0	5.0	All	5.0	NA
Isophorone	ug/L	4	0	5.0	5.0	All	5.0	NA
Naphthalene	ug/L	4	0	5.0	5.0	All	5.0	NA
Nitrobenzene	ug/L	4	0	5.0	5.0	All	5.0	NA
N-Nitroso-di-n-propylamine	ug/L	4	0	5.0	5.0	All	5.0	NA
N-Nitrosodiphenylamine	ug/L	4	0	5.0	5.0	All	5.0	NA
Pentachlorophenol	ug/L	4	0	0.50	0.50	All	0.50	NA
Phenanthrene	ug/L	4	0	5.0	5.0	All	5.0	NA
Phenol	ug/L	4	0	5.0	5.0	All	5.0	NA
Pyrene	ug/L	4	0	5.0	5.0	All	5.0	NA
Pesticides								
4,4'-DDD	ug/L	4	0	0.050	0.050	All	0.050	NA
4,4'-DDE	ug/L	4	0	0.050	0.050	All	0.050	NA
4,4'-DDT	ug/L	4	0	0.050	0.050	All	0.050	NA
Aldrin	ug/L	4	0	0.025	0.025	All	0.025	NA
alpha-BHC	ug/L	4	0	0.025	0.025	All	0.025	NA
alpha-Chlordane	ug/L	4	0	0.025	0.025	All	0.025	NA
beta-BHC	ug/L	4	0	0.025	0.025	All	0.025	NA
delta-BHC	ug/L	4	0	0.025	0.025	All	0.025	NA
Dieldrin	ug/L	4	0	0.050	0.050	All	0.050	NA
Endosulfan I	ug/L	4	0	0.025	0.025	All	0.025	NA
Endosulfan II	ug/L	4	0	0.050	0.050	All	0.050	NA
Endosulfan Sulfate	ug/L	4	0	0.050	0.050	All	0.050	NA
Endrin	ug/L	4	0	0.050	0.050	All	0.050	NA
Endrin Aldehyde	ug/L	4	0	0.050	0.050	All	0.050	NA
Endrin Ketone	ug/L	4	0	0.050	0.050	All	0.050	NA
gamma-BHC (Lindane)	ug/L	4	0	0.025	0.025	All	0.025	NA
gamma-Chlordane	ug/L	4	0	0.025	0.025	All	0.025	NA
Heptachlor	ug/L	4	0	0.025	0.025	All	0.025	NA
Heptachlor Epoxide	ug/L	4	0	0.025	0.025	All	0.025	NA
Methoxychlor	ug/L	4	0	0.25	0.25	All	0.25	NA
Toxaphene	ug/L	4	0	2.5	2.5	All	2.5	NA
Herbicides								
2,4-D	ug/L	4	4	0.71	1.0	R6AM1W	0.90	NA
2,4-DB	ug/L	4	0	0.25	0.25	All	0.25	NA
2,4,5-T	ug/L	4	0	0.25	0.25	All	0.25	NA
2,4,5-TP (Silvex)	ug/L	4	0	0.25	0.25	All	0.25	NA
Dalapon	ug/L	4	0	60	60	All	60	NA
Dicamba	ug/L	4	0	0.60	0.60	All	0.60	NA
Dichlorprop	ug/L	4	0	3.0	3.0	All	3.0	NA
Dinoseb	ug/L	4	0	5.0	5.0	All	5.0	NA
MCPA	ug/L	4	0	60	60	All	60	NA
MCPP	ug/L	4	0	60	60	All	60	NA

Table III-B6
Calculations for Risk Assessment Modeling
2002 River Surface Water (Downstream - Plot 6 - A Line Only)
Sauget, IL

Analyte	Units	Downstream River Surface Water (Plot 6-A-Line)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/L	4	0	0.25	0.25	All	0.25	NA
Dioxins/Furans (a)								
TEQ	ug/L	1	0	0.0000020	0.0000020	R6BM1W	0.0000020	NA
Metals (total)								
Aluminum	mg/L	4	3	0.38	1.1	R6AU1W	0.81	NA
Antimony	mg/L	4	1	0.0051	0.010	All (except R6AU1W)	0.0088	NA
Arsenic	mg/L	4	1	0.0050	0.0053	R6AU1W	0.0051	NA
Barium	mg/L	4	4	0.060	0.061	All (except R6AD1W)	0.06075	NA
Beryllium	mg/L	4	0	0.0020	0.0020	All	0.0020	NA
Cadmium	mg/L	4	0	0.0025	0.0025	All	0.0025	NA
Calcium	mg/L	4	4	46	49	R6AM1W/R6AM2W	48	NA
Chromium	mg/L	4	0	0.0050	0.0050	All	0.0050	NA
Cobalt	mg/L	4	2	0.00076	0.0050	R6AM2W/R6AU1W	0.0030	NA
Copper	mg/L	4	1	0.0025	0.010	All (except R6AD1W)	0.0081	NA
Iron	mg/L	4	4	1.0	1.4	R6AU1W	1.2	NA
Lead	mg/L	4	0	0.0025	0.0025	All	0.0025	NA
Magnesium	mg/L	4	4	18	19	All (except R6AD1W)	19	NA
Manganese	mg/L	4	4	0.082	0.093	R6AU1W	0.086	NA
Mercury	mg/L	4	0	0.00010	0.00010	All	0.00010	NA
Nickel	mg/L	4	0	0.020	0.020	All	0.020	NA
Potassium	mg/L	4	4	3.5	3.5	All	3.5	NA
Selenium	mg/L	4	0	0.0050	0.0050	All	0.0050	NA
Silver	mg/L	4	0	0.0050	0.0050	All	0.0050	NA
Sodium	mg/L	4	4	18	19	R6AD1W/R6AU1W	19	NA
Thallium	mg/L	4	0	0.0050	0.0050	All	0.0050	NA
Vanadium	mg/L	4	1	0.0042	0.0050	All (except R6AD1W)	0.0048	NA
Zinc	mg/L	4	4	0.0049	0.0066	R6AU1W	0.0055	NA

NOTES:
a = Dioxins/furans were not analyzed for the A-Line river samples. Therefore, the B-Line sample set was used.
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B6
Calculations for Risk Assessment Modeling
2002 River Surface Water (Site-Wide - All Near Shore Sample Locations Except Plot 1)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Near Shore Sample Locations Except Plot 1)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/L	18	0	0.50	0.50	All	0.50	NA
1,1,2,2-Tetrachloroethane	ug/L	18	0	0.50	0.50	All	0.50	NA
1,1,2-Trichloroethane	ug/L	18	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethane	ug/L	18	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethylene	ug/L	18	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethane	ug/L	18	6	0.13	0.70	R3AU1W	0.44	NA
1,2-Dichloroethene (total)	ug/L	18	1	0.24	1.0	All (except R3AU1W)	0.96	NA
1,2-Dichloropropane	ug/L	18	0	0.50	0.50	All	0.50	NA
2-Butanone (MEK)	ug/L	18	0	5.0	5.0	All	5.0	NA
2-Hexanone	ug/L	18	0	5.0	5.0	All	5.0	NA
4-Methyl-2-pentanone (MIBK)	ug/L	18	1	3.8	5.0	All (except R3AU1W)	4.9	NA
Acetone	ug/L	18	1	13	40	R4AU1W	14	NA
Benzene	ug/L	18	8	0.21	4.5	R3AU1W	0.66	NA
Bromodichloromethane	ug/L	18	0	0.50	0.50	All	0.50	NA
Bromoform	ug/L	18	0	0.50	0.50	All	0.50	NA
Bromomethane	ug/L	17	0	0.50	0.50	All	0.50	NA
Carbon Disulfide	ug/L	18	2	0.28	0.50	Various	0.48	NA
Carbon Tetrachloride	ug/L	18	1	0.17	0.50	All (except R3AU1W)	0.48	NA
Chlorobenzene	ug/L	18	13	0.50	56	R3AU1W	4.9	NA
Chloroethane	ug/L	18	0	0.50	0.50	All	0.50	NA
Chloroform	ug/L	18	0	0.50	0.50	All	0.50	NA
Chloromethane	ug/L	18	4	0.20	0.96	R4AU1W	0.50	NA
cis-1,3-Dichloropropene	ug/L	18	0	0.50	0.50	All	0.50	NA
Dibromochloromethane	ug/L	18	0	0.50	0.50	All	0.50	NA
Ethylbenzene	ug/L	18	1	0.50	1.3	R3AU1W	0.54	NA
Methylene Chloride	ug/L	18	0	2.5	2.5	All	2.5	NA
Styrene (Monomer)	ug/L	18	0	0.50	0.50	All	0.50	NA
Tetrachloroethene	ug/L	18	0	0.50	0.50	All	0.50	NA
Toluene	ug/L	18	5	0.45	4.5	R3AU1W	0.74	NA
trans-1,3-Dichloropropene	ug/L	18	0	0.50	0.50	All	0.50	NA
Trichloroethylene	ug/L	18	0	0.50	0.50	All	0.50	NA
Vinyl chloride	ug/L	18	0	0.50	0.50	All	0.50	NA
Xylenes, Total	ug/L	18	1	1.0	3.0	R3AU1W	1.1	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/L	18	0	5.0	5.0	All	5.0	NA
1,2-Dichlorobenzene	ug/L	18	1	5.0	40	R3AU1W	6.9	NA
1,3-Dichlorobenzene	ug/L	18	0	5.0	5.0	All	5.0	NA
1,4-Dichlorobenzene	ug/L	18	1	3.9	5.0	All (except R3AU1W)	4.9	NA
2,2'-Oxybis(1-Chloropropane)	ug/L	18	0	5.0	5.0	All	5.0	NA
2,4,5-Trichlorophenol	ug/L	18	0	5.0	5.0	All	5.0	NA
2,4,6-Trichlorophenol	ug/L	18	1	5.0	17	R3AU1W	5.7	NA
2,4-Dichlorophenol	ug/L	18	7	1.2	69	R3AU1W	7.6	NA
2,4-Dimethylphenol	ug/L	18	1	5.0	8.3	R3AU1W	5.2	NA
2,4-Dinitrophenol	ug/L	18	0	25	25	All	25	NA
2,4-Dinitrotoluene	ug/L	18	0	5.0	5.0	All	5.0	NA
2,6-Dinitrotoluene	ug/L	18	0	5.0	5.0	All	5.0	NA
2-Chloronaphthalene	ug/L	18	0	5.0	5.0	All	5.0	NA
2-Chlorophenol	ug/L	18	5	1.4	31	R3AU1W	5.7	NA
2-Methylnaphthalene	ug/L	18	0	5.0	5.0	All	5.0	NA
2-Methylphenol (o-Cresol)	ug/L	18	0	5.0	5.0	All	5.0	NA
2-Nitroaniline	ug/L	18	0	25	25	All	25	NA
2-Nitrophenol	ug/L	18	0	5.0	5.0	All	5.0	NA
3,3'-Dichlorobenzidine	ug/L	18	0	10	10	All	10	NA
3/4-Methylphenol (m&p-Cresol)	ug/L	18	1	5.0	27	R3AU1W	6.2	NA
3-Nitroaniline	ug/L	18	0	25	25	All	25	NA
4,6-Dinitro-2-methylphenol	ug/L	18	0	25	25	All	25	NA
4-Bromophenyl Phenyl Ether	ug/L	18	0	5.0	5.0	All	5.0	NA
4-Chloro-3-methylphenol	ug/L	18	0	5.0	5.0	All	5.0	NA
4-Chloroaniline	ug/L	18	9	1.4	160	R3AU1W	16	NA
4-Chlorophenyl Phenyl Ether	ug/L	18	0	5.0	5.0	All	5.0	NA
4-Nitroaniline	ug/L	18	0	25	25	All	25	NA
4-Nitrophenol	ug/L	18	0	25	25	All	25	NA
Acenaphthene	ug/L	18	0	5.0	5.0	All	5.0	NA
Acenaphthylene	ug/L	18	0	5.0	5.0	All	5.0	NA
Anthracene	ug/L	18	0	5.0	5.0	All	5.0	NA

Table III-B6
Calculations for Risk Assessment Modeling
2002 River Surface Water (Site-Wide - All Near Shore Sample Locations Except Plot 1)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Near Shore Sample Locations Except Plot 1)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/L	18	0	5.0	5.0	All	5.0	NA
Benzo(a)pyrene	ug/L	18	0	5.0	5.0	All	5.0	NA
Benzo(b)fluoranthene	ug/L	18	0	5.0	5.0	All	5.0	NA
Benzo(g,h,i)perylene	ug/L	18	0	5.0	5.0	All	5.0	NA
Benzo(k)fluoranthene	ug/L	18	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethoxy)methane	ug/L	18	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethyl)ether	ug/L	18	0	5.0	5.0	All	5.0	NA
bis(2-Ethylhexyl)phthalate	ug/L	18	0	5.0	5.0	All	5.0	NA
Butyl Benzyl Phthalate	ug/L	18	0	5.0	5.0	All	5.0	NA
Carbazole	ug/L	18	0	5.0	5.0	All	5.0	NA
Chrysene	ug/L	18	0	5.0	5.0	All	5.0	NA
Dibenzo(a,h)anthracene	ug/L	18	0	5.0	5.0	All	5.0	NA
Dibenzofuran	ug/L	18	0	5.0	5.0	All	5.0	NA
Diethyl Phthalate	ug/L	18	0	5.0	5.0	All	5.0	NA
Dimethyl Phthalate	ug/L	18	0	5.0	5.0	All	5.0	NA
Di-n-butylphthalate	ug/L	18	0	5.0	5.0	All	5.0	NA
Di-n-octylphthalate	ug/L	18	0	5.0	5.0	All	5.0	NA
Fluoranthene	ug/L	18	0	5.0	5.0	All	5.0	NA
Fluorene	ug/L	18	0	5.0	5.0	All	5.0	NA
Hexachlorobenzene	ug/L	18	0	5.0	5.0	All	5.0	NA
Hexachlorobutadiene	ug/L	18	0	5.0	5.0	All	5.0	NA
Hexachlorocyclopentadiene	ug/L	18	0	5.0	5.0	All	5.0	NA
Hexachloroethane	ug/L	18	0	5.0	5.0	All	5.0	NA
Indeno(1,2,3-cd)pyrene	ug/L	18	0	5.0	5.0	All	5.0	NA
Isophorone	ug/L	18	0	5.0	5.0	All	5.0	NA
Naphthalene	ug/L	18	1	5.0	21	R3AU1W	5.9	NA
Nitrobenzene	ug/L	18	1	2.5	5.0	All (except R3AU1W)	4.9	NA
N-Nitroso-di-n-propylamine	ug/L	18	0	5.0	5.0	All	5.0	NA
N-Nitrosodiphenylamine	ug/L	18	0	5.0	5.0	All	5.0	NA
Pentachlorophenol	ug/L	18	1	0.50	1.9	R3AU1W	0.58	NA
Phenanthrene	ug/L	18	0	5.0	5.0	All	5.0	NA
Phenol	ug/L	18	5	5.0	12	R3AM1W	5.8	NA
Pyrene	ug/L	18	0	5.0	5.0	All	5.0	NA
Pesticides								
4,4'-DDD	ug/L	18	0	0.050	0.050	All	0.050	NA
4,4'-DDE	ug/L	18	0	0.050	0.050	All	0.050	NA
4,4'-DDT	ug/L	18	0	0.050	0.050	All	0.050	NA
Aldrin	ug/L	18	0	0.025	0.025	All	0.025	NA
alpha-BHC	ug/L	18	0	0.025	0.025	All	0.025	NA
alpha-Chlordane	ug/L	18	0	0.025	0.025	All	0.025	NA
beta-BHC	ug/L	18	1	0.0092	0.025	All (except R3AD1W)	0.024	NA
delta-BHC	ug/L	18	0	0.025	0.025	All	0.025	NA
Dieldrin	ug/L	18	0	0.050	0.050	All	0.050	NA
Endosulfan I	ug/L	18	0	0.025	0.025	All	0.025	NA
Endosulfan II	ug/L	18	0	0.050	0.050	All	0.050	NA
Endosulfan Sulfate	ug/L	18	0	0.050	0.050	All	0.050	NA
Endrin	ug/L	18	0	0.050	0.050	All	0.050	NA
Endrin Aldehyde	ug/L	18	0	0.050	0.050	All	0.050	NA
Endrin Ketone	ug/L	18	1	0.023	0.050	All (except R5AN1W)	0.049	NA
gamma-BHC (Lindane)	ug/L	18	0	0.025	0.025	All	0.025	NA
gamma-Chlordane	ug/L	18	0	0.025	0.025	All	0.025	NA
Heptachlor	ug/L	18	0	0.025	0.025	All	0.025	NA
Heptachlor Epoxide	ug/L	18	0	0.025	0.025	All	0.025	NA
Methoxychlor	ug/L	18	0	0.25	0.25	All	0.25	NA
Toxaphene	ug/L	18	0	2.5	2.5	All	2.5	NA
Herbicides								
2,4-D	ug/L	18	14	0.25	29	R3AU1W	3.0	NA
2,4-DB	ug/L	18	0	0.25	0.25	All	0.25	NA
2,4,5-T	ug/L	18	1	0.25	0.30	R3AU1W	0.25	NA
2,4,5-TP (Silvex)	ug/L	18	0	0.25	0.25	All	0.25	NA
Dalapon	ug/L	18	0	60	60	All	60	NA
Dicamba	ug/L	18	0	0.60	0.60	All	0.60	NA
Dichlorprop	ug/L	18	7	0.11	3.0	Various	2.2	NA
Dinoseb	ug/L	18	0	5.0	5.0	All	5.0	NA
MCPA	ug/L	18	0	60	60	All	60	NA
MCPP	ug/L	18	0	60	60	All	60	NA

Table III-B6
Calculations for Risk Assessment Modeling
2002 River Surface Water (Site-Wide - All Near Shore Sample Locations Except Plot 1)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Near Shore Sample Locations Except Plot 1)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/L	18	0	0.25	0.25	All	0.25	NA
Dioxins/Furans (a)								
TEQ	ug/L	5	0	0.0000013	0.0000020	R6BM1W	0.0000017	NA
Metals (total)								
Aluminum	mg/L	18	17	0.38	1.1	R6AU1W	0.80	NA
Antimony	mg/L	18	1	0.0051	0.010	All (except R6AU1W)	0.0097	NA
Arsenic	mg/L	18	3	0.0036	0.0061	R5AN1W	0.0050	NA
Barium	mg/L	18	18	0.058	0.065	R3AU1W/R4AM1W	0.062	NA
Beryllium	mg/L	18	0	0.0020	0.0020	All	0.0020	NA
Cadmium	mg/L	18	0	0.0025	0.0025	All	0.0025	NA
Calcium	mg/L	18	18	46	54	R3AD1W/R4AM1W	51	NA
Chromium	mg/L	18	0	0.0050	0.0050	All	0.0050	NA
Cobalt	mg/L	18	2	0.00076	0.0050	Various	0.0046	NA
Copper	mg/L	18	1	0.0025	0.010	All (except R6AD1W)	0.0093	NA
Iron	mg/L	18	18	0.68	1.4	R6AU1W	1.1	NA
Lead	mg/L	18	1	0.0025	0.0031	R4AU1W	0.0025	NA
Magnesium	mg/L	18	18	18	22	R3AD1W	20	NA
Manganese	mg/L	18	18	0.082	0.14	R3AU1W	0.092	NA
Mercury	mg/L	18	1	0.00010	0.00014	R5AM1W	0.00010	NA
Nickel	mg/L	18	0	0.020	0.020	All	0.020	NA
Potassium	mg/L	18	18	3.3	3.7	R3AD1W	3.5	NA
Selenium	mg/L	18	0	0.0050	0.0050	All	0.0050	NA
Silver	mg/L	18	0	0.0050	0.0050	All	0.0050	NA
Sodium	mg/L	18	18	18	24	R3AU1W	21	NA
Thallium	mg/L	18	0	0.0050	0.0050	All	0.0050	NA
Vanadium	mg/L	18	2	0.0034	0.0050	Various	0.0049	NA
Zinc	mg/L	18	8	0.0042	0.010	Various	0.0080	NA

NOTES:
a = Dioxins/furans were not analyzed for the A-Line river samples. Therefore, the B-Line sample set was used.
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B7
Calculations for Risk Assessment Modeling
2007 River Surface Water (Adjacent - All Near Shore Sample Locations)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Near Shore Sample Locations)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/L	2	0	0.50	0.50	All	0.50	NA
1,1,2,2-Tetrachloroethane	ug/L	2	0	0.50	0.50	All	0.50	NA
1,1,2-Trichloroethane	ug/L	2	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethane	ug/L	2	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethylene	ug/L	2	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethane	ug/L	2	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethene (total)	ug/L	2	0	1.0	1.0	All	1.0	NA
1,2-Dichloropropane	ug/L	2	0	0.50	0.50	All	0.50	NA
2-Butanone (MEK)	ug/L	2	0	5.0	5.0	All	5.0	NA
2-Hexanone	ug/L	2	0	5.0	5.0	All	5.0	NA
4-Methyl-2-pentanone (MIBK)	ug/L	2	0	5.0	5.0	All	5.0	NA
Acetone	ug/L	2	0	13	13	All	13	NA
Benzene	ug/L	2	0	0.50	0.50	All	0.50	NA
Bromodichloromethane	ug/L	2	0	0.50	0.50	All	0.50	NA
Bromoform	ug/L	2	0	0.50	0.50	All	0.50	NA
Bromomethane	ug/L	2	0	0.50	0.50	All	0.50	NA
Carbon Disulfide	ug/L	2	0	1.0	1.0	All	1.0	NA
Carbon Tetrachloride	ug/L	2	0	0.50	0.50	All	0.50	NA
Chlorobenzene	ug/L	2	0	0.50	0.50	All	0.50	NA
Chloroethane	ug/L	2	0	0.50	0.50	All	0.50	NA
Chloroform	ug/L	2	0	0.50	0.50	All	0.50	NA
Chloromethane	ug/L	2	0	0.50	0.50	All	0.50	NA
cis-1,3-Dichloropropene	ug/L	2	0	0.50	0.50	All	0.50	NA
Dibromochloromethane	ug/L	2	0	0.50	0.50	All	0.50	NA
Ethylbenzene	ug/L	2	0	0.50	0.50	All	0.50	NA
Methylene Chloride	ug/L	2	0	2.5	2.5	All	2.5	NA
Styrene (Monomer)	ug/L	2	0	0.50	0.50	All	0.50	NA
Tetrachloroethene	ug/L	2	0	0.50	0.50	All	0.50	NA
Toluene	ug/L	2	0	0.50	0.50	All	0.50	NA
trans-1,3-Dichloropropene	ug/L	2	0	0.50	0.50	All	0.50	NA
Trichloroethylene	ug/L	2	0	0.50	0.50	All	0.50	NA
Vinyl chloride	ug/L	2	0	0.50	0.50	All	0.50	NA
Xylenes, Total	ug/L	2	0	1.0	1.0	All	1.0	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
1,2-Dichlorobenzene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
1,3-Dichlorobenzene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
1,4-Dichlorobenzene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
2,2'-Oxybis(1-Chloropropane)	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
2,4,5-Trichlorophenol	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
2,4,6-Trichlorophenol	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
2,4-Dichlorophenol	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
2,4-Dimethylphenol	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
2,4-Dinitrophenol	ug/L	2	0	24	25	SW-SA2-GMCS-5	24	NA
2,4-Dinitrotoluene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
2,6-Dinitrotoluene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
2-Chloronaphthalene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
2-Chlorophenol	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
2-Methylnaphthalene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
2-Methylphenol (o-Cresol)	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
2-Nitroaniline	ug/L	2	0	24	25	SW-SA2-GMCS-5	24	NA
2-Nitrophenol	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
3,3'-Dichlorobenzidine	ug/L	2	0	9.5	9.5	All	9.5	NA
3/4-Methylphenol (m&p-Cresol)	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
3-Nitroaniline	ug/L	2	0	24	25	SW-SA2-GMCS-5	24	NA
4,6-Dinitro-2-methylphenol	ug/L	2	0	24	25	SW-SA2-GMCS-5	24	NA
4-Bromophenyl Phenyl Ether	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
4-Chloro-3-methylphenol	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
4-Chloroaniline	ug/L	2	0	9.5	9.5	All	9.5	NA
4-Chlorophenyl Phenyl Ether	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
4-Nitroaniline	ug/L	2	0	24	25	SW-SA2-GMCS-5	24	NA
4-Nitrophenol	ug/L	2	0	24	25	SW-SA2-GMCS-5	24	NA
Acenaphthene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Acenaphthylene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Anthracene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA

Table III-B7
Calculations for Risk Assessment Modeling
2007 River Surface Water (Adjacent - All Near Shore Sample Locations)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Near Shore Sample Locations)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Benzo(a)pyrene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Benzo(b)fluoranthene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Benzo(g,h,i)perylene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Benzo(k)fluoranthene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
bis(2-Chloroethoxy)methane	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
bis(2-Chloroethyl)ether	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
bis(2-Ethylhexyl)phthalate	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Butyl Benzyl Phthalate	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Carbazole	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Chrysene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Dibenzo(a,h)anthracene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Dibenzofuran	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Diethyl Phthalate	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Dimethyl Phthalate	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Di-n-butylphthalate	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Di-n-octylphthalate	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Fluoranthene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Fluorene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Hexachlorobenzene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Hexachlorobutadiene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Hexachlorocyclopentadiene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Hexachloroethane	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Indeno(1,2,3-cd)pyrene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Isophorone	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Naphthalene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Nitrobenzene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
N-Nitroso-di-n-propylamine	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
N-Nitrosodiphenylamine	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Pentachlorophenol	ug/L	2	0	0.12	0.13	SW-SA2-GMCS-2	0.12	NA
Phenanthrene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Phenol	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Pyrene	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
Pesticides								
4,4'-DDD	ug/L	2	0	0.049	0.049	All	0.049	NA
4,4'-DDE	ug/L	2	0	0.049	0.049	All	0.049	NA
4,4'-DDT	ug/L	2	0	0.049	0.049	All	0.049	NA
Aldrin	ug/L	2	0	0.025	0.025	All	0.025	NA
alpha-BHC	ug/L	2	0	0.025	0.025	All	0.025	NA
alpha-Chlordane	ug/L	2	0	0.025	0.025	All	0.025	NA
beta-BHC	ug/L	2	0	0.025	0.025	All	0.025	NA
delta-BHC	ug/L	2	0	0.025	0.025	All	0.025	NA
Dieldrin	ug/L	2	0	0.049	0.049	All	0.049	NA
Endosulfan I	ug/L	2	0	0.025	0.025	All	0.025	NA
Endosulfan II	ug/L	2	0	0.049	0.049	All	0.049	NA
Endosulfan Sulfate	ug/L	2	0	0.049	0.049	All	0.049	NA
Endrin	ug/L	2	0	0.049	0.049	All	0.049	NA
Endrin Aldehyde	ug/L	2	0	0.049	0.049	All	0.049	NA
Endrin Ketone	ug/L	2	0	0.049	0.049	All	0.049	NA
gamma-BHC (Lindane)	ug/L	2	0	0.025	0.025	All	0.025	NA
gamma-Chlordane	ug/L	2	0	0.025	0.025	All	0.025	NA
Heptachlor	ug/L	2	0	0.025	0.025	All	0.025	NA
Heptachlor Epoxide	ug/L	2	0	0.025	0.025	All	0.025	NA
Methoxychlor	ug/L	2	0	0.25	0.25	All	0.25	NA
Toxaphene	ug/L	2	0	2.5	2.5	All	2.5	NA
Herbicides								
2,4-D	ug/L	2	0	0.25	0.25	SW-SA2-GMCS-2	0.25	NA
2,4-DB	ug/L	2	0	0.25	0.25	SW-SA2-GMCS-2	0.25	NA
2,4,5-T	ug/L	2	0	0.25	0.25	SW-SA2-GMCS-2	0.25	NA
2,4,5-TP (Silvex)	ug/L	2	0	0.25	0.25	SW-SA2-GMCS-2	0.25	NA
Dalapon	ug/L	2	0	4.9	5.0	SW-SA2-GMCS-2	4.9	NA
Dicamba	ug/L	2	0	0.25	0.25	SW-SA2-GMCS-2	0.25	NA
Dichlorprop	ug/L	2	2	0.11	0.11	All	0.11	NA
Dinoseb	ug/L	2	0	4.8	4.9	SW-SA2-GMCS-5	4.8	NA
MCPA	ug/L	2	0	60	60	All	60	NA
MCPP	ug/L	2	0	60	60	All	60	NA

Table III-B7
Calculations for Risk Assessment Modeling
2007 River Surface Water (Adjacent - All Near Shore Sample Locations)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Near Shore Sample Locations)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/L	0	0	NA	NA	NA	NA	NA
Dioxins/Furans (a)								
TEQ	ug/L	0	0	NA	NA	NA	NA	NA
Metals (dissolved)								
Aluminum	mg/L	2	0	0.10	0.10	All	0.10	NA
Antimony	mg/L	2	0	0.010	0.010	All	0.010	NA
Arsenic	mg/L	2	0	0.0050	0.0050	All	0.0050	NA
Barium	mg/L	2	2	0.065	0.066	SW-SA2-GMCS-5	0.066	NA
Beryllium	mg/L	2	0	0.0020	0.0020	All	0.0020	NA
Cadmium	mg/L	2	0	0.0025	0.0025	All	0.0025	NA
Calcium	mg/L	2	2	58	59	SW-SA2-GMCS-5	59	NA
Chromium	mg/L	2	0	0.0050	0.0050	All	0.0050	NA
Cobalt	mg/L	2	0	0.0050	0.0050	All	0.0050	NA
Copper	mg/L	2	0	0.0018	0.0019	SW-SA2-GMCS-5	0.0018	NA
Iron	mg/L	2	2	0.030	0.032	SW-SA2-GMCS-5	0.031	NA
Lead	mg/L	2	0	0.0025	0.0025	All	0.0025	NA
Magnesium	mg/L	2	2	21	21	All	21	NA
Manganese	mg/L	2	0	0.0050	0.0050	All	0.0050	NA
Mercury	mg/L	2	0	0.00010	0.00010	All	0.00010	NA
Nickel	mg/L	2	0	0.020	0.020	All	0.020	NA
Potassium	mg/L	2	2	4.5	4.6	SW-SA2-GMCS-5	4.6	NA
Selenium	mg/L	2	0	0.0050	0.0050	All	0.0050	NA
Silver	mg/L	2	0	0.0050	0.0050	All	0.0050	NA
Sodium	mg/L	2	2	32	34	SW-SA2-GMCS-5	33	NA
Thallium	mg/L	2	0	0.013	0.013	All	0.013	NA
Vanadium	mg/L	2	2	0.0020	0.0023	SW-SA2-GMCS-5	0.0022	NA
Zinc	mg/L	2	0	0.0028	0.0034	SW-SA2-GMCS-5	0.0031	NA

NOTES:
a = Dioxins/furans were not analyzed for the A-Line river samples. Therefore, the B-Line sample set was used.
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B8
Calculations for Risk Assessment Modeling
Pond - Surface Water
Sauget, IL

Analyte	Units	Pond Surface Water						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/L	9	0	0.50	0.50	All	0.50	NA
1,1,2,2-Tetrachloroethane	ug/L	9	0	0.50	0.50	All	0.50	NA
1,1,2-Trichloroethane	ug/L	9	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethane	ug/L	9	1	0.21	0.50	Various	0.47	NA
1,1-Dichloroethylene	ug/L	9	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethane	ug/L	9	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethene (total)	ug/L	9	0	1.0	1.0	All	1.0	NA
1,2-Dichloropropane	ug/L	9	0	0.50	0.50	All	0.50	NA
2-Butanone (MEK)	ug/L	9	1	1.2	5.0	Various	4.6	NA
2-Hexanone	ug/L	9	0	5.0	5.0	All	5.0	NA
4-Methyl-2-pentanone (MIBK)	ug/L	9	0	5.0	5.0	All	5.0	NA
Acetone	ug/L	9	0	13	13	All	13	NA
Benzene	ug/L	9	3	0.10	0.72	SPond-1-W	0.44	NA
Bromodichloromethane	ug/L	9	0	0.50	0.50	All	0.50	NA
Bromoform	ug/L	9	0	0.50	0.50	All	0.50	NA
Bromomethane	ug/L	9	0	0.50	0.50	All	0.50	NA
Carbon Disulfide	ug/L	9	0	0.50	0.50	All	0.50	NA
Carbon Tetrachloride	ug/L	9	0	0.50	0.50	All	0.50	NA
Chlorobenzene	ug/L	9	0	0.50	0.50	All	0.50	NA
Chloroethane	ug/L	9	0	0.50	0.50	All	0.50	NA
Chloroform	ug/L	9	0	0.50	0.50	All	0.50	NA
Chloromethane	ug/L	9	0	0.50	0.50	All	0.50	NA
cis-1,3-Dichloropropene	ug/L	9	0	0.50	0.50	All	0.50	NA
Dibromochloromethane	ug/L	9	0	0.50	0.50	All	0.50	NA
Ethylbenzene	ug/L	9	2	0.14	0.50	Various	0.45	NA
Methylene Chloride	ug/L	9	0	2.5	2.5	All	2.5	NA
Styrene (Monomer)	ug/L	9	1	0.50	2.8	SPond-1-W	0.76	NA
Tetrachloroethene	ug/L	9	0	0.50	0.50	All	0.50	NA
Toluene	ug/L	9	0	0.50	0.50	All	0.50	NA
trans-1,3-Dichloropropene	ug/L	9	0	0.50	0.50	All	0.50	NA
Trichloroethylene	ug/L	9	0	0.50	0.50	All	0.50	NA
Vinyl chloride	ug/L	9	0	0.50	0.50	All	0.50	NA
Xylenes, Total	ug/L	9	0	1.0	1.0	All	1.0	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/L	9	0	5.0	5.0	All	5.0	NA
1,2-Dichlorobenzene	ug/L	9	0	5.0	5.0	All	5.0	NA
1,3-Dichlorobenzene	ug/L	9	0	5.0	5.0	All	5.0	NA
1,4-Dichlorobenzene	ug/L	9	0	5.0	5.0	All	5.0	NA
2,2'-Oxybis(1-Chloropropane)	ug/L	9	0	5.0	5.0	All	5.0	NA
2,4,5-Trichlorophenol	ug/L	9	0	5.0	5.0	All	5.0	NA
2,4,6-Trichlorophenol	ug/L	9	0	5.0	5.0	All	5.0	NA
2,4-Dichlorophenol	ug/L	9	0	5.0	5.0	All	5.0	NA
2,4-Dimethylphenol	ug/L	9	0	5.0	5.0	All	5.0	NA
2,4-Dinitrophenol	ug/L	9	0	25	25	All	25	NA
2,4-Dinitrotoluene	ug/L	9	0	5.0	5.0	All	5.0	NA
2,6-Dinitrotoluene	ug/L	9	0	5.0	5.0	All	5.0	NA
2-Chloronaphthalene	ug/L	9	0	5.0	5.0	All	5.0	NA
2-Chlorophenol	ug/L	9	0	5.0	5.0	All	5.0	NA
2-Methylnaphthalene	ug/L	9	0	5.0	5.0	All	5.0	NA
2-Methylphenol (o-Cresol)	ug/L	9	0	5.0	5.0	All	5.0	NA
2-Nitroaniline	ug/L	9	0	25	25	All	25	NA
2-Nitrophenol	ug/L	9	0	5.0	5.0	All	5.0	NA
3,3'-Dichlorobenzidine	ug/L	9	0	10	10	All	10	NA
3/4-Methylphenol (m&p-Cresol)	ug/L	9	0	5.0	5.0	All	5.0	NA
3-Nitroaniline	ug/L	9	0	25	25	All	25	NA
4,6-Dinitro-2-methylphenol	ug/L	9	0	25	25	All	25	NA
4-Bromophenyl Phenyl Ether	ug/L	9	0	5.0	5.0	All	5.0	NA
4-Chloro-3-methylphenol	ug/L	9	0	5.0	5.0	All	5.0	NA
4-Chloroaniline	ug/L	9	0	10	10	All	10	NA
4-Chlorophenyl Phenyl Ether	ug/L	9	0	5.0	5.0	All	5.0	NA
4-Nitroaniline	ug/L	9	0	25	25	All	25	NA
4-Nitrophenol	ug/L	9	0	25	25	All	25	NA
Acenaphthene	ug/L	9	0	5.0	5.0	All	5.0	NA
Acenaphthylene	ug/L	9	0	5.0	5.0	All	5.0	NA
Anthracene	ug/L	9	0	5.0	5.0	All	5.0	NA

Table III-B8
Calculations for Risk Assessment Modeling
Pond - Surface Water
Sauget, IL

Analyte	Units	Pond Surface Water						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/L	9	0	5.0	5.0	All	5.0	NA
Benzo(a)pyrene	ug/L	9	2	1.5	5.0	Various	4.6	NA
Benzo(b)fluoranthene	ug/L	9	0	5.0	5.0	All	5.0	NA
Benzo(g,h,i)perylene	ug/L	9	2	2.7	5.0	Various	4.6	NA
Benzo(k)fluoranthene	ug/L	9	1	5.0	7.2	SPond-3-W	5.2	NA
bis(2-Chloroethoxy)methane	ug/L	9	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethyl)ether	ug/L	9	0	5.0	5.0	All	5.0	NA
bis(2-Ethylhexyl)phthalate	ug/L	9	0	5.0	5.0	All	5.0	NA
Butyl Benzyl Phthalate	ug/L	9	0	5.0	5.0	All	5.0	NA
Carbazole	ug/L	9	0	5.0	5.0	All	5.0	NA
Chrysene	ug/L	9	0	5.0	5.0	All	5.0	NA
Dibenzo(a,h)anthracene	ug/L	9	0	5.0	5.0	All	5.0	NA
Dibenzofuran	ug/L	9	0	5.0	5.0	All	5.0	NA
Diethyl Phthalate	ug/L	9	0	5.0	5.0	All	5.0	NA
Dimethyl Phthalate	ug/L	9	0	5.0	5.0	All	5.0	NA
Di-n-butylphthalate	ug/L	9	1	1.3	5.0	Various	4.6	NA
Di-n-octylphthalate	ug/L	9	0	5.0	5.0	All	5.0	NA
Fluoranthene	ug/L	9	0	5.0	5.0	All	5.0	NA
Fluorene	ug/L	9	0	5.0	5.0	All	5.0	NA
Hexachlorobenzene	ug/L	9	0	5.0	5.0	All	5.0	NA
Hexachlorobutadiene	ug/L	9	0	5.0	5.0	All	5.0	NA
Hexachlorocyclopentadiene	ug/L	9	0	5.0	5.0	All	5.0	NA
Hexachloroethane	ug/L	9	0	5.0	5.0	All	5.0	NA
Indeno(1,2,3-cd)pyrene	ug/L	9	1	3.0	5.0	Various	4.8	NA
Isophorone	ug/L	9	0	5.0	5.0	All	5.0	NA
Naphthalene	ug/L	9	1	4.3	5.0	Various	4.9	NA
Nitrobenzene	ug/L	9	0	5.0	5.0	All	5.0	NA
N-Nitroso-di-n-propylamine	ug/L	9	0	5.0	5.0	All	5.0	NA
N-Nitrosodiphenylamine	ug/L	9	0	5.0	5.0	All	5.0	NA
Pentachlorophenol	ug/L	9	0	0.50	0.50	All	0.50	NA
Phenanthrene	ug/L	9	0	5.0	5.0	All	5.0	NA
Phenol	ug/L	9	0	5.0	5.0	All	5.0	NA
Pyrene	ug/L	9	0	5.0	5.0	All	5.0	NA
Pesticides								
4,4'-DDD	ug/L	9	0	0.050	0.050	All	0.050	NA
4,4'-DDE	ug/L	9	0	0.050	0.050	All	0.050	NA
4,4'-DDT	ug/L	9	1	0.028	0.050	Various	0.048	NA
Aldrin	ug/L	9	1	0.0089	0.025	Various	0.023	NA
alpha-BHC	ug/L	9	0	0.025	0.025	All	0.025	NA
alpha-Chlordane	ug/L	9	0	0.025	0.025	All	0.025	NA
beta-BHC	ug/L	9	1	0.0079	0.025	Various	0.023	NA
delta-BHC	ug/L	7	0	0.025	0.025	All	0.025	NA
Dieldrin	ug/L	9	1	0.0050	0.050	Various	0.041	NA
Endosulfan I	ug/L	9	0	0.025	0.025	All	0.025	NA
Endosulfan II	ug/L	9	0	0.050	0.050	All	0.050	NA
Endosulfan Sulfate	ug/L	9	0	0.050	0.050	All	0.050	NA
Endrin	ug/L	9	0	0.050	0.050	All	0.050	NA
Endrin Aldehyde	ug/L	9	0	0.050	0.050	All	0.050	NA
Endrin Ketone	ug/L	9	0	0.050	0.050	All	0.050	NA
gamma-BHC (Lindane)	ug/L	9	0	0.025	0.025	All	0.025	NA
gamma-Chlordane	ug/L	9	0	0.025	0.025	All	0.025	NA
Heptachlor	ug/L	9	0	0.025	0.025	All	0.025	NA
Heptachlor Epoxide	ug/L	9	0	0.025	0.025	All	0.025	NA
Methoxychlor	ug/L	9	0	0.25	0.25	All	0.25	NA
Toxaphene	ug/L	9	0	2.5	2.5	All	2.5	NA
Herbicides								
2,4-D	ug/L	9	0	0.25	0.25	All	0.25	NA
2,4-DB	ug/L	9	0	0.25	0.25	All	0.25	NA
2,4,5-T	ug/L	9	0	0.25	0.25	All	0.25	NA
2,4,5-TP (Silvex)	ug/L	9	0	0.25	0.25	All	0.25	NA
Dalapon	ug/L	9	0	60	60	All	60	NA
Dicamba	ug/L	9	0	0.60	0.60	All	0.60	NA
Dichlorprop	ug/L	9	0	3.0	3.0	All	3.0	NA
Dinoseb	ug/L	9	0	5.0	5.0	All	5.0	NA
MCPA	ug/L	9	0	60	60	All	60	NA
MCPP	ug/L	9	0	60	60	All	60	NA

Table III-B8
Calculations for Risk Assessment Modeling
Pond - Surface Water
Sauget, IL

Analyte	Units	Pond Surface Water						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/L	9	1	0.050	0.25	Various	0.23	NA
Dioxins/Furans								
TEQ	ug/L	3	2	0.0000072	0.0000096	L-Pond-1-W	0.0000081	NA
Metals								
Aluminum	mg/L	8	2	0.10	7.7	P11W	1.1	NA
Antimony	mg/L	8	0	0.0023	0.010	Various	0.0083	NA
Arsenic	mg/L	8	1	0.0050	0.0054	P11W	0.0051	NA
Barium	mg/L	8	8	0.12	0.20	P11W	0.14	NA
Beryllium	mg/L	8	0	0.0020	0.0020	All	0.0020	NA
Cadmium	mg/L	8	1	0.00065	0.0025	Various	0.0023	NA
Calcium	mg/L	8	8	57	110	SPond-1-W	86	NA
Chromium	mg/L	8	1	0.00060	0.010	P11W	0.0051	NA
Cobalt	mg/L	8	2	0.0036	0.010	L-Pond-1-W	0.0055	NA
Copper	mg/L	8	6	0.0032	0.013	P11W	0.0073	NA
Iron	mg/L	8	8	0.023	8.9	P11W	1.2	NA
Lead	mg/L	8	2	0.0025	0.014	P11W	0.0040	NA
Magnesium	mg/L	8	8	15	27	SPond -1-W	23	NA
Manganese	mg/L	8	8	0.019	0.46	P11W	0.11	NA
Mercury	mg/L	8	3	0.000088	0.00010	Various	0.00010	NA
Nickel	mg/L	8	3	0.0022	0.020	Various	0.014	NA
Potassium	mg/L	8	8	0.49	5.6	P11W	2.0	NA
Selenium	mg/L	8	0	0.0050	0.0050	All	0.0050	NA
Silver	mg/L	8	0	0.0050	0.0050	All	0.0050	NA
Sodium	mg/L	8	8	5.8	11	SPond-1-W,-2-W, -2W (Dup)	8.8	NA
Thallium	mg/L	8	0	0.0050	0.0050	All	0.0050	NA
Vanadium	mg/L	8	3	0.00046	0.023	P11W	0.0057	NA
Zinc	mg/L	8	8	0.013	0.052	P11W	0.022	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL

Table III-B9
Calculations for Risk Assessment Modeling
2002 River Surface Water (Upstream - Plot 1 - A, B, C-Lines)
Sauget, IL

Analyte	Units	Upstream River Surface Water (Plot 1 - A, B, & C-Lines)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/L	8	0	0.50	0.50	All	0.50	NA
1,1,2,2-Tetrachloroethane	ug/L	8	0	0.50	0.50	All	0.50	NA
1,1,2-Trichloroethane	ug/L	8	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethane	ug/L	8	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethylene	ug/L	8	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethane	ug/L	8	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethene (total)	ug/L	8	0	1.0	1.0	All	1.0	NA
1,2-Dichloropropane	ug/L	8	0	0.50	0.50	All	0.50	NA
2-Butanone (MEK)	ug/L	8	0	5.0	5.0	All	5.0	NA
2-Hexanone	ug/L	8	0	5.0	5.0	All	5.0	NA
4-Methyl-2-pentanone (MIBK)	ug/L	8	0	5.0	5.0	All	5.0	NA
Acetone	ug/L	8	0	13	13	All	13	NA
Benzene	ug/L	8	0	0.50	0.50	All	0.50	NA
Bromodichloromethane	ug/L	8	0	0.50	0.50	All	0.50	NA
Bromoform	ug/L	8	0	0.50	0.50	All	0.50	NA
Bromomethane	ug/L	8	0	0.50	0.50	All	0.50	NA
Carbon Disulfide	ug/L	8	0	0.50	0.50	All	0.50	NA
Carbon Tetrachloride	ug/L	8	0	0.50	0.50	All	0.50	NA
Chlorobenzene	ug/L	8	0	0.50	0.50	All	0.50	NA
Chloroethane	ug/L	8	0	0.50	0.50	All	0.50	NA
Chloroform	ug/L	8	0	0.50	0.50	All	0.50	NA
Chloromethane	ug/L	8	1	0.25	0.50	R1BD1W	0.47	NA
cis-1,3-Dichloropropene	ug/L	8	0	0.50	0.50	All	0.50	NA
Dibromochloromethane	ug/L	8	0	0.50	0.50	All	0.50	NA
Ethylbenzene	ug/L	8	0	0.50	0.50	All	0.50	NA
Methylene Chloride	ug/L	8	0	2.5	2.5	All	2.5	NA
Styrene (Monomer)	ug/L	8	0	0.50	0.50	All	0.50	NA
Tetrachloroethene	ug/L	8	0	0.50	0.50	All	0.50	NA
Toluene	ug/L	8	0	0.50	0.50	All	0.50	NA
trans-1,3-Dichloropropene	ug/L	8	0	0.50	0.50	All	0.50	NA
Trichloroethylene	ug/L	8	0	0.50	0.50	All	0.50	NA
Vinyl chloride	ug/L	8	0	0.50	0.50	All	0.50	NA
Xylenes, Total	ug/L	8	0	1.0	1.0	All	1.0	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/L	8	0	5.0	5.0	All	5.0	NA
1,2-Dichlorobenzene	ug/L	8	0	5.0	5.0	All	5.0	NA
1,3-Dichlorobenzene	ug/L	8	0	5.0	5.0	All	5.0	NA
1,4-Dichlorobenzene	ug/L	8	0	5.0	5.0	All	5.0	NA
2,2'-Oxybis(1-Chloropropane)	ug/L	8	0	5.0	5.0	All	5.0	NA
2,4,5-Trichlorophenol	ug/L	8	0	5.0	5.0	All	5.0	NA
2,4,6-Trichlorophenol	ug/L	8	0	5.0	5.0	All	5.0	NA
2,4-Dichlorophenol	ug/L	8	0	5.0	5.0	All	5.0	NA
2,4-Dimethylphenol	ug/L	8	0	5.0	5.0	All	5.0	NA
2,4-Dinitrophenol	ug/L	8	0	25	25	All	25	NA
2,4-Dinitrotoluene	ug/L	8	0	5.0	5.0	All	5.0	NA
2,6-Dinitrotoluene	ug/L	8	0	5.0	5.0	All	5.0	NA
2-Chloronaphthalene	ug/L	8	0	5.0	5.0	All	5.0	NA
2-Chlorophenol	ug/L	8	0	5.0	5.0	All	5.0	NA
2-Methylnaphthalene	ug/L	8	0	5.0	5.0	All	5.0	NA
2-Methylphenol (o-Cresol)	ug/L	8	0	5.0	5.0	All	5.0	NA
2-Nitroaniline	ug/L	8	0	25	25	All	25	NA
2-Nitrophenol	ug/L	8	0	5.0	5.0	All	5.0	NA
3,3'-Dichlorobenzidine	ug/L	8	0	10	10	All	10	NA
3/4-Methylphenol (m&p-Cresol)	ug/L	8	0	5.0	5.0	All	5.0	NA
3-Nitroaniline	ug/L	8	0	25	25	All	25	NA
4,6-Dinitro-2-methylphenol	ug/L	8	0	25	25	All	25	NA
4-Bromophenyl Phenyl Ether	ug/L	8	0	5.0	5.0	All	5.0	NA
4-Chloro-3-methylphenol	ug/L	8	0	5.0	5.0	All	5.0	NA
4-Chloroaniline	ug/L	8	0	10	10	All	10	NA
4-Chlorophenyl Phenyl Ether	ug/L	8	0	5.0	5.0	All	5.0	NA
4-Nitroaniline	ug/L	8	0	25	25	All	25	NA
4-Nitrophenol	ug/L	8	0	25	25	All	25	NA
Acenaphthene	ug/L	8	0	5.0	5.0	All	5.0	NA
Acenaphthylene	ug/L	8	0	5.0	5.0	All	5.0	NA
Anthracene	ug/L	8	0	5.0	5.0	All	5.0	NA

Table III-B9
Calculations for Risk Assessment Modeling
2002 River Surface Water (Upstream - Plot 1 - A, B, C-Lines)
Sauget, IL

Analyte	Units	Upstream River Surface Water (Plot 1 - A, B, & C-Lines)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/L	8	0	5.0	5.0	All	5.0	NA
Benzo(a)pyrene	ug/L	8	0	5.0	5.0	All	5.0	NA
Benzo(b)fluoranthene	ug/L	8	0	5.0	5.0	All	5.0	NA
Benzo(g,h,i)perylene	ug/L	8	0	5.0	5.0	All	5.0	NA
Benzo(k)fluoranthene	ug/L	8	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethoxy)methane	ug/L	8	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethyl)ether	ug/L	8	0	5.0	5.0	All	5.0	NA
bis(2-Ethylhexyl)phthalate	ug/L	8	1	5.0	14	R1BM2W	6.1	NA
Butyl Benzyl Phthalate	ug/L	8	0	5.0	5.0	All	5.0	NA
Carbazole	ug/L	8	0	5.0	5.0	All	5.0	NA
Chrysene	ug/L	8	0	5.0	5.0	All	5.0	NA
Dibenzo(a,h)anthracene	ug/L	8	0	5.0	5.0	All	5.0	NA
Dibenzofuran	ug/L	8	0	5.0	5.0	All	5.0	NA
Diethyl Phthalate	ug/L	8	0	5.0	5.0	All	5.0	NA
Dimethyl Phthalate	ug/L	8	0	5.0	5.0	All	5.0	NA
Di-n-butylphthalate	ug/L	8	0	5.0	5.0	All	5.0	NA
Di-n-octylphthalate	ug/L	8	0	5.0	5.0	All	5.0	NA
Fluoranthene	ug/L	8	0	5.0	5.0	All	5.0	NA
Fluorene	ug/L	8	0	5.0	5.0	All	5.0	NA
Hexachlorobenzene	ug/L	8	0	5.0	5.0	All	5.0	NA
Hexachlorobutadiene	ug/L	8	0	5.0	5.0	All	5.0	NA
Hexachlorocyclopentadiene	ug/L	8	0	5.0	5.0	All	5.0	NA
Hexachloroethane	ug/L	8	0	5.0	5.0	All	5.0	NA
Indeno(1,2,3-cd)pyrene	ug/L	8	0	5.0	5.0	All	5.0	NA
Isophorone	ug/L	8	0	5.0	5.0	All	5.0	NA
Naphthalene	ug/L	8	0	5.0	5.0	All	5.0	NA
Nitrobenzene	ug/L	8	0	5.0	5.0	All	5.0	NA
N-Nitroso-di-n-propylamine	ug/L	8	0	5.0	5.0	All	5.0	NA
N-Nitrosodiphenylamine	ug/L	8	0	5.0	5.0	All	5.0	NA
Pentachlorophenol	ug/L	8	1	0.30	0.50	All (except R1CM1W)	0.48	NA
Phenanthrene	ug/L	8	0	5.0	5.0	All	5.0	NA
Phenol	ug/L	8	0	5.0	5.0	All	5.0	NA
Pyrene	ug/L	8	0	5.0	5.0	All	5.0	NA
Pesticides								
4,4'-DDD	ug/L	8	0	0.050	0.050	All	0.050	NA
4,4'-DDE	ug/L	8	0	0.050	0.050	All	0.050	NA
4,4'-DDT	ug/L	8	0	0.050	0.050	All	0.050	NA
Aldrin	ug/L	8	0	0.025	0.025	All	0.025	NA
alpha-BHC	ug/L	8	0	0.025	0.025	All	0.025	NA
alpha-Chlordane	ug/L	8	0	0.025	0.025	All	0.025	NA
beta-BHC	ug/L	8	0	0.025	0.025	All	0.025	NA
delta-BHC	ug/L	8	0	0.025	0.025	All	0.025	NA
Dieldrin	ug/L	8	0	0.050	0.050	All	0.050	NA
Endosulfan I	ug/L	8	0	0.025	0.025	All	0.025	NA
Endosulfan II	ug/L	8	0	0.050	0.050	All	0.050	NA
Endosulfan Sulfate	ug/L	8	0	0.050	0.050	All	0.050	NA
Endrin	ug/L	8	0	0.050	0.050	All	0.050	NA
Endrin Aldehyde	ug/L	8	0	0.050	0.050	All	0.050	NA
Endrin Ketone	ug/L	8	6	0.015	0.050	R1AM1W/R1BU1W	0.026	NA
gamma-BHC (Lindane)	ug/L	8	0	0.025	0.025	All	0.025	NA
gamma-Chlordane	ug/L	8	0	0.025	0.025	All	0.025	NA
Heptachlor	ug/L	8	0	0.025	0.025	All	0.025	NA
Heptachlor Epoxide	ug/L	8	0	0.025	0.025	All	0.025	NA
Methoxychlor	ug/L	8	0	0.25	0.25	All	0.25	NA
Toxaphene	ug/L	8	0	2.5	2.5	All	2.5	NA
Herbicides								
2,4-D	ug/L	8	0	0.25	0.25	All	0.25	NA
2,4-DB	ug/L	8	0	0.25	0.25	All	0.25	NA
2,4,5-T	ug/L	8	0	0.25	0.25	All	0.25	NA
2,4,5-TP (Silvex)	ug/L	8	0	0.25	0.25	All	0.25	NA
Dalapon	ug/L	8	0	60	60	All	60	NA
Dicamba	ug/L	8	0	0.60	0.60	All	0.60	NA
Dichlorprop	ug/L	8	0	3.0	3.0	All	3.0	NA
Dinoseb	ug/L	8	0	5.0	5.0	All	5.0	NA
MCPA	ug/L	8	0	60	60	All	60	NA
MCPP	ug/L	8	0	60	60	All	60	NA

Table III-B9
Calculations for Risk Assessment Modeling
2002 River Surface Water (Upstream - Plot 1 - A, B, C-Lines)
Sauget, IL

Analyte	Units	Upstream River Surface Water (Plot 1 - A, B, & C-Lines)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/L	8	0	0.25	0.25	All	0.25	NA
Dioxins/Furans								
TEQ	ug/L	2	0	0.0000024	0.0000041	R1BM2W	0.0000032	NA
Metals (total)								
Aluminum	mg/L	8	8	0.58	0.88	R1BD1W	0.71	NA
Antimony	mg/L	8	0	0.010	0.010	All	0.010	NA
Arsenic	mg/L	8	0	0.0050	0.050	All	0.0050	NA
Barium	mg/L	8	8	0.055	0.061	R1BD1W	0.059	NA
Beryllium	mg/L	8	0	0.0020	0.0020	All	0.0020	NA
Cadmium	mg/L	8	0	0.0025	0.0025	All	0.0025	NA
Calcium	mg/L	8	8	49	53	R1AM1W	51	NA
Chromium	mg/L	8	0	0.0050	0.0050	All	0.0050	NA
Cobalt	mg/L	8	1	0.0011	0.0050	All (except R1AM1W)	0.0045	NA
Copper	mg/L	8	0	0.010	0.010	All	0.010	NA
Iron	mg/L	8	8	0.83	1.1	R1AD1W/R1BD1W	0.97	NA
Lead	mg/L	8	0	0.0025	0.0025	All	0.0025	NA
Magnesium	mg/L	8	8	20	21	Various	21	NA
Manganese	mg/L	8	8	0.077	0.084	R1AM1W/R1BD1W	0.081	NA
Mercury	mg/L	8	0	0.00010	0.00010	All	0.00010	NA
Nickel	mg/L	8	0	0.020	0.020	All	0.020	NA
Potassium	mg/L	8	8	3.2	3.5	Various	3.4	NA
Selenium	mg/L	8	0	0.0050	0.0050	All	0.0050	NA
Silver	mg/L	8	0	0.0050	0.0050	All	0.0050	NA
Sodium	mg/L	8	8	17	20	R1BU1W	18	NA
Thallium	mg/L	8	1	0.0050	0.0052	R1CMIW	0.0050	NA
Vanadium	mg/L	8	1	0.0033	0.0050	All (except R1BU1W)	0.0048	NA
Zinc	mg/L	8	1	0.0046	0.010	All (except R1BU1W)	0.0093	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B9
Calculations for Risk Assessment Modeling
2002 River Surface Water (Adjacent - All Sample Locations Except Plots 1 and 6)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Sample Locations Except Plots 1 and 6)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/L	32	0	0.50	0.50	All	0.50	NA
1,1,2,2-Tetrachloroethane	ug/L	32	0	0.50	0.50	All	0.50	NA
1,1,2-Trichloroethane	ug/L	32	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethane	ug/L	32	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethylene	ug/L	32	3	0.30	0.50	Various	0.49	0.50
1,2-Dichloroethane	ug/L	32	11	0.13	0.70	R3AU1W	0.44	0.48
1,2-Dichloroethene (total)	ug/L	32	3	0.22	1.0	Various	0.93	1.0
1,2-Dichloropropane	ug/L	32	0	0.50	0.50	All	0.50	NA
2-Butanone (MEK)	ug/L	32	0	5.0	5.0	All	5.0	NA
2-Hexanone	ug/L	32	1	0.33	5.0	All (except R3CM1W)	4.9	5.1
4-Methyl-2-pentanone (MIBK)	ug/L	32	1	3.8	5.0	All (except R3AU1W)	5.0	5.0
Acetone	ug/L	32	1	13	40	R4AU1W	13	15
Benzene	ug/L	32	11	0.23	4.5	R3AU1W	0.58	0.83
Bromodichloromethane	ug/L	32	0	0.50	0.50	All	0.50	NA
Bromoform	ug/L	32	0	0.50	0.50	All	0.50	NA
Bromomethane	ug/L	31	0	0.50	0.50	All	0.50	NA
Carbon Disulfide	ug/L	32	5	0.28	0.69	R2CM1W	0.48	0.51
Carbon Tetrachloride	ug/L	32	1	0.17	0.50	All (except R3AU1W)	0.49	0.51
Chlorobenzene	ug/L	32	23	0.50	56	R3AU1W	3.6	7.0
Chloroethane	ug/L	32	0	0.50	0.50	All	0.50	NA
Chloroform	ug/L	32	0	0.50	0.50	All	0.50	NA
Chloromethane	ug/L	32	5	0.20	0.96	R4AU1W	0.50	0.54
cis-1,3-Dichloropropene	ug/L	32	0	0.50	0.50	All	0.50	NA
Dibromochloromethane	ug/L	32	0	0.50	0.50	All	0.50	NA
Ethylbenzene	ug/L	32	1	0.50	1.3	R3AU1W	0.53	0.57
Methylene Chloride	ug/L	32	0	2.5	2.5	All	2.5	NA
Styrene (Monomer)	ug/L	32	0	0.50	0.50	All	0.50	NA
Tetrachloroethene	ug/L	32	1	0.45	0.50	All (except R4CM1W)	0.50	0.50
Toluene	ug/L	32	9	0.29	4.5	R3AU1W	0.64	0.88
trans-1,3-Dichloropropene	ug/L	32	0	0.50	0.50	All	0.50	NA
Trichloroethylene	ug/L	32	1	0.50	0.58	R3BM1W	0.50	0.51
Vinyl chloride	ug/L	32	0	0.50	0.50	All	0.50	NA
Xylenes, Total	ug/L	32	3	0.20	3.0	R3AU1W	1.0	1.2
SVOCs								
1,2,4-Trichlorobenzene	ug/L	32	0	5.0	5.0	All	5.0	NA
1,2-Dichlorobenzene	ug/L	32	2	1.2	40	R3AU1W	6.0	8.1
1,3-Dichlorobenzene	ug/L	32	0	5.0	5.0	All	5.0	NA
1,4-Dichlorobenzene	ug/L	32	1	3.9	5.0	All (except R3AU1W)	5.0	5.0
2,2'-Oxybis(1-Chloropropane)	ug/L	32	0	5.0	5.0	All	5.0	NA
2,4,5-Trichlorophenol	ug/L	32	0	5.0	5.0	All	5.0	NA
2,4,6-Trichlorophenol	ug/L	32	1	5.0	17	R3AU1W	5.4	6.1
2,4-Dichlorophenol	ug/L	32	11	1.2	69	R3AU1W	6.1	10
2,4-Dimethylphenol	ug/L	32	1	5.0	8.3	R3AU1W	5.1	5.3
2,4-Dinitrophenol	ug/L	32	0	25	25	All	25	NA
2,4-Dinitrotoluene	ug/L	32	0	5.0	5.0	All	5.0	NA
2,6-Dinitrotoluene	ug/L	32	1	5.0	17	R4CM1W	5.4	6.1
2-Chloronaphthalene	ug/L	32	0	5.0	5.0	All	5.0	NA
2-Chlorophenol	ug/L	32	6	1.4	31	R3AU1W	5.3	7.0
2-Methylnaphthalene	ug/L	32	0	5.0	5.0	All	5.0	NA
2-Methylphenol (o-Cresol)	ug/L	32	0	5.0	5.0	All	5.0	NA
2-Nitroaniline	ug/L	32	0	25	25	All	25	NA
2-Nitrophenol	ug/L	32	0	5.0	5.0	All	5.0	NA
3,3'-Dichlorobenzidine	ug/L	32	0	10	10	All	10	NA
3/4-Methylphenol (m&p-Cresol)	ug/L	32	2	1.3	27	R3AU1W	5.6	6.9
3-Nitroaniline	ug/L	32	0	25	25	All	25	NA
4,6-Dinitro-2-methylphenol	ug/L	32	0	25	25	All	25	NA
4-Bromophenyl Phenyl Ether	ug/L	32	0	5.0	5.0	All	5.0	NA
4-Chloro-3-methylphenol	ug/L	32	0	5.0	5.0	All	5.0	NA
4-Chloroaniline	ug/L	32	17	1.2	160	R3AU1W	12	22
4-Chlorophenyl Phenyl Ether	ug/L	32	0	5.0	5.0	All	5.0	NA
4-Nitroaniline	ug/L	32	0	25	25	All	25	NA
4-Nitrophenol	ug/L	32	0	25	25	All	25	NA
Acenaphthene	ug/L	32	0	5.0	5.0	All	5.0	NA
Acenaphthylene	ug/L	32	0	5.0	5.0	All	5.0	NA
Anthracene	ug/L	32	0	5.0	5.0	All	5.0	NA

Table III-B9
Calculations for Risk Assessment Modeling
2002 River Surface Water (Adjacent - All Sample Locations Except Plots 1 and 6)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Sample Locations Except Plots 1 and 6)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/L	32	0	5.0	5.0	All	5.0	NA
Benzo(a)pyrene	ug/L	32	0	5.0	5.0	All	5.0	NA
Benzo(b)fluoranthene	ug/L	32	0	5.0	5.0	All	5.0	NA
Benzo(g,h,i)perylene	ug/L	32	0	5.0	5.0	All	5.0	NA
Benzo(k)fluoranthene	ug/L	32	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethoxy)methane	ug/L	32	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethyl)ether	ug/L	32	0	5.0	5.0	All	5.0	NA
bis(2-Ethylhexyl)phthalate	ug/L	32	0	5.0	5.0	All	5.0	NA
Butyl Benzyl Phthalate	ug/L	32	0	5.0	5.0	All	5.0	NA
Carbazole	ug/L	32	0	5.0	5.0	All	5.0	NA
Chrysene	ug/L	32	0	5.0	5.0	All	5.0	NA
Dibenzo(a,h)anthracene	ug/L	32	0	5.0	5.0	All	5.0	NA
Dibenzofuran	ug/L	32	0	5.0	5.0	All	5.0	NA
Diethyl Phthalate	ug/L	32	0	5.0	5.0	All	5.0	NA
Dimethyl Phthalate	ug/L	32	0	5.0	5.0	All	5.0	NA
Di-n-butylphthalate	ug/L	32	0	5.0	5.0	All	5.0	NA
Di-n-octylphthalate	ug/L	32	0	5.0	5.0	All	5.0	NA
Fluoranthene	ug/L	32	0	5.0	5.0	All	5.0	NA
Fluorene	ug/L	32	0	5.0	5.0	All	5.0	NA
Hexachlorobenzene	ug/L	32	0	5.0	5.0	All	5.0	NA
Hexachlorobutadiene	ug/L	32	0	5.0	5.0	All	5.0	NA
Hexachlorocyclopentadiene	ug/L	32	0	5.0	5.0	All	5.0	NA
Hexachloroethane	ug/L	32	0	5.0	5.0	All	5.0	NA
Indeno(1,2,3-cd)pyrene	ug/L	32	0	5.0	5.0	All	5.0	NA
Isophorone	ug/L	32	0	5.0	5.0	All	5.0	NA
Naphthalene	ug/L	32	1	5.0	21	R3AU1W	5.5	6.5
Nitrobenzene	ug/L	32	1	2.5	5.0	All (except R3AU1W)	4.9	5.1
N-Nitroso-di-n-propylamine	ug/L	32	0	5.0	5.0	All	5.0	NA
N-Nitrosodiphenylamine	ug/L	32	0	5.0	5.0	All	5.0	NA
Pentachlorophenol	ug/L	32	1	0.50	1.9	R3AU1W	0.54	0.63
Phenanthrene	ug/L	32	0	5.0	5.0	All	5.0	NA
Phenol	ug/L	32	9	3.1	14	R3BM1W	5.7	6.4
Pyrene	ug/L	32	0	5.0	5.0	All	5.0	NA
Pesticides								
4,4'-DDD	ug/L	31	0	0.050	0.050	All	0.050	NA
4,4'-DDE	ug/L	31	0	0.050	0.050	All	0.050	NA
4,4'-DDT	ug/L	31	0	0.050	0.050	All	0.050	NA
Aldrin	ug/L	31	0	0.025	0.025	All	0.025	NA
alpha-BHC	ug/L	31	0	0.025	0.025	All	0.025	NA
alpha-Chlordane	ug/L	31	0	0.025	0.025	All	0.025	NA
beta-BHC	ug/L	31	2	0.0080	0.025	Various	0.024	0.025
delta-BHC	ug/L	31	0	0.025	0.025	All	0.025	NA
Dieldrin	ug/L	31	0	0.050	0.050	All	0.050	NA
Endosulfan I	ug/L	31	0	0.025	0.025	All	0.025	NA
Endosulfan II	ug/L	31	0	0.050	0.050	All	0.050	NA
Endosulfan Sulfate	ug/L	31	0	0.050	0.050	All	0.050	NA
Endrin	ug/L	31	0	0.050	0.050	All	0.050	NA
Endrin Aldehyde	ug/L	31	0	0.050	0.050	All	0.050	NA
Endrin Ketone	ug/L	31	2	0.019	0.050	Various	0.048	0.051
gamma-BHC (Lindane)	ug/L	31	0	0.025	0.025	All	0.025	NA
gamma-Chlordane	ug/L	31	0	0.025	0.025	All	0.025	NA
Heptachlor	ug/L	31	0	0.025	0.025	All	0.025	NA
Heptachlor Epoxide	ug/L	31	0	0.025	0.025	All	0.025	NA
Methoxychlor	ug/L	31	0	0.25	0.25	All	0.25	NA
Toxaphene	ug/L	31	0	2.5	2.5	All	2.5	NA
Herbicides								
2,4-D	ug/L	32	19	0.25	29	R3AU1W	2.2	4.0
2,4-DB	ug/L	32	0	0.25	0.25	All	0.25	NA
2,4,5-T	ug/L	32	1	0.25	0.30	R3AU1W	0.25	0.25
2,4,5-TP (Silvex)	ug/L	32	0	0.25	0.25	All	0.25	NA
Dalapon	ug/L	32	0	60	60	All	60	NA
Dicamba	ug/L	32	0	0.60	0.60	All	0.60	NA
Dichlorprop	ug/L	32	12	0.11	3.0	Various	2.2	2.6
Dinoseb	ug/L	32	0	5.0	5.0	All	5.0	NA
MCPA	ug/L	32	1	31	60	All (except R5BM1W)	59	61
MCPP	ug/L	32	1	53	60	All (except R5BM1W)	60	60

Table III-B9
Calculations for Risk Assessment Modeling
2002 River Surface Water (Adjacent - All Sample Locations Except Plots 1 and 6)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Sample Locations Except Plots 1 and 6)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/L	32	0	0.25	0.25	All	0.25	NA
Dioxins/Furans								
TEQ	ug/L	4	0	0.0000018	0.0000029	R2BM1W	0.0000024	NA
Metals (total)								
Aluminum	mg/L	32	32	0.15	1.0	R2AM2W	0.75	0.81
Antimony	mg/L	32	0	0.010	0.010	All	0.010	NA
Arsenic	mg/L	32	4	0.0032	0.0061	R5AN1W	0.0049	0.0051
Barium	mg/L	32	32	0.058	0.065	Various	0.061	0.062
Beryllium	mg/L	32	0	0.0020	0.0020	All	0.0020	NA
Cadmium	mg/L	32	0	0.0025	0.0025	All	0.0025	NA
Calcium	mg/L	32	32	50	54	Various	52	52
Chromium	mg/L	32	0	0.0050	0.0050	All	0.0050	NA
Cobalt	mg/L	32	6	0.00075	0.010	R3CM1W	0.0044	0.0050
Copper	mg/L	32	1	0.0050	0.039	R3CM1W	0.011	0.012
Iron	mg/L	32	32	0.45	1.4	R4AD1W	1.1	1.1
Lead	mg/L	32	5	0.0025	0.0049	R4BM1W	0.0026	0.0028
Magnesium	mg/L	32	32	19	22	Various	21	21
Manganese	mg/L	32	31	0.0050	0.14	R3AU1W	0.086	0.093
Mercury	mg/L	32	3	0.000080	0.00020	R5BD1W	0.00010	0.00011
Nickel	mg/L	32	0	0.020	0.020	All	0.020	NA
Potassium	mg/L	32	32	3.3	3.7	Various	3.5	3.5
Selenium	mg/L	32	0	0.0050	0.0050	All	0.0050	NA
Silver	mg/L	32	1	0.00084	0.0050	All (except R5BM1W)	0.0049	0.0051
Sodium	mg/L	32	32	18	24	R3AU1W	21	21
Thallium	mg/L	32	0	0.0050	0.0050	All	0.0050	NA
Vanadium	mg/L	32	2	0.0034	0.0050	Various	0.0049	0.0050
Zinc	mg/L	32	8	0.0039	0.041	R4BU1W	0.011	0.014

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B9
Calculations for Risk Assessment Modeling
2002 River Surface Water (Downstream - Plot 6 - A, B C-Lines)
Sauget, IL

Analyte	Units	Downstream River Surface Water (Plot 6 - A, B, & C-Lines)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/L	7	0	0.50	0.50	All	0.50	NA
1,1,2,2-Tetrachloroethane	ug/L	7	0	0.50	0.50	All	0.50	NA
1,1,2-Trichloroethane	ug/L	7	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethane	ug/L	7	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethylene	ug/L	7	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethane	ug/L	7	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethene (total)	ug/L	7	0	1.0	1.0	All	1.0	NA
1,2-Dichloropropane	ug/L	7	0	0.50	0.50	All	0.50	NA
2-Butanone (MEK)	ug/L	7	0	5.0	5.0	All	5.0	NA
2-Hexanone	ug/L	7	0	5.0	5.0	All	5.0	NA
4-Methyl-2-pentanone (MIBK)	ug/L	7	0	5.0	5.0	All	5.0	NA
Acetone	ug/L	7	0	13	13	All	13	NA
Benzene	ug/L	7	3	0.19	0.50	Various	0.39	NA
Bromodichloromethane	ug/L	7	0	0.50	0.50	All	0.50	NA
Bromoform	ug/L	7	0	0.50	0.50	All	0.50	NA
Bromomethane	ug/L	7	0	0.50	0.50	All	0.50	NA
Carbon Disulfide	ug/L	7	0	0.50	0.50	All	0.50	NA
Carbon Tetrachloride	ug/L	7	0	0.50	0.50	All	0.50	NA
Chlorobenzene	ug/L	7	5	0.50	2.3	R6AM1W	1.2	NA
Chloroethane	ug/L	7	0	0.50	0.50	All	0.50	NA
Chloroform	ug/L	7	0	0.50	0.50	All	0.50	NA
Chloromethane	ug/L	7	0	0.50	0.50	All	0.50	NA
cis-1,3-Dichloropropene	ug/L	7	0	0.50	0.50	All	0.50	NA
Dibromochloromethane	ug/L	7	0	0.50	0.50	All	0.50	NA
Ethylbenzene	ug/L	7	0	0.50	0.50	All	0.50	NA
Methylene Chloride	ug/L	7	0	2.5	2.5	All	2.5	NA
Styrene (Monomer)	ug/L	7	0	0.50	0.50	All	0.50	NA
Tetrachloroethene	ug/L	7	0	0.50	0.50	All	0.50	NA
Toluene	ug/L	7	1	0.45	0.50	All (except R6AM1W)	0.49	NA
trans-1,3-Dichloropropene	ug/L	7	0	0.50	0.50	All	0.50	NA
Trichloroethylene	ug/L	7	0	0.50	0.50	All	0.50	NA
Vinyl chloride	ug/L	7	0	0.50	0.50	All	0.50	NA
Xylenes, Total	ug/L	7	0	1.0	1.0	All	1.0	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/L	7	0	5.0	5.0	All	5.0	NA
1,2-Dichlorobenzene	ug/L	7	0	5.0	5.0	All	5.0	NA
1,3-Dichlorobenzene	ug/L	7	0	5.0	5.0	All	5.0	NA
1,4-Dichlorobenzene	ug/L	7	0	5.0	5.0	All	5.0	NA
2,2'-Oxybis(1-Chloropropane)	ug/L	7	0	5.0	5.0	All	5.0	NA
2,4,5-Trichlorophenol	ug/L	7	0	5.0	5.0	All	5.0	NA
2,4,6-Trichlorophenol	ug/L	7	0	5.0	5.0	All	5.0	NA
2,4-Dichlorophenol	ug/L	7	0	5.0	5.0	All	5.0	NA
2,4-Dimethylphenol	ug/L	7	0	5.0	5.0	All	5.0	NA
2,4-Dinitrophenol	ug/L	7	0	25	25	All	25	NA
2,4-Dinitrotoluene	ug/L	7	0	5.0	5.0	All	5.0	NA
2,6-Dinitrotoluene	ug/L	7	0	5.0	5.0	All	5.0	NA
2-Chloronaphthalene	ug/L	7	0	5.0	5.0	All	5.0	NA
2-Chlorophenol	ug/L	7	0	5.0	5.0	All	5.0	NA
2-Methylnaphthalene	ug/L	7	0	5.0	5.0	All	5.0	NA
2-Methylphenol (o-Cresol)	ug/L	7	0	5.0	5.0	All	5.0	NA
2-Nitroaniline	ug/L	7	0	25	25	All	25	NA
2-Nitrophenol	ug/L	7	0	5.0	5.0	All	5.0	NA
3,3'-Dichlorobenzidine	ug/L	7	0	10	10	All	10	NA
3/4-Methylphenol (m&p-Cresol)	ug/L	7	0	5.0	5.0	All	5.0	NA
3-Nitroaniline	ug/L	7	0	25	25	All	25	NA
4,6-Dinitro-2-methylphenol	ug/L	7	0	25	25	All	25	NA
4-Bromophenyl Phenyl Ether	ug/L	7	0	5.0	5.0	All	5.0	NA
4-Chloro-3-methylphenol	ug/L	7	0	5.0	5.0	All	5.0	NA
4-Chloroaniline	ug/L	7	0	10	10	All	10	NA
4-Chlorophenyl Phenyl Ether	ug/L	7	0	5.0	5.0	All	5.0	NA
4-Nitroaniline	ug/L	7	0	25	25	All	25	NA
4-Nitrophenol	ug/L	7	0	25	25	All	25	NA
Acenaphthene	ug/L	7	0	5.0	5.0	All	5.0	NA
Acenaphthylene	ug/L	7	0	5.0	5.0	All	5.0	NA
Anthracene	ug/L	7	0	5.0	5.0	All	5.0	NA

Table III-B9
Calculations for Risk Assessment Modeling
2002 River Surface Water (Downstream - Plot 6 - A, B C-Lines)
Sauget, IL

Analyte	Units	Downstream River Surface Water (Plot 6 - A, B, & C-Lines)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/L	7	0	5.0	5.0	All	5.0	NA
Benzo(a)pyrene	ug/L	7	0	5.0	5.0	All	5.0	NA
Benzo(b)fluoranthene	ug/L	7	0	5.0	5.0	All	5.0	NA
Benzo(g,h,i)perylene	ug/L	7	0	5.0	5.0	All	5.0	NA
Benzo(k)fluoranthene	ug/L	7	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethoxy)methane	ug/L	7	0	5.0	5.0	All	5.0	NA
bis(2-Chloroethyl)ether	ug/L	7	0	5.0	5.0	All	5.0	NA
bis(2-Ethylhexyl)phthalate	ug/L	7	1	1.7	5.0	All (except R6CM1W)	4.5	NA
Butyl Benzyl Phthalate	ug/L	7	0	5.0	5.0	All	5.0	NA
Carbazole	ug/L	7	0	5.0	5.0	All	5.0	NA
Chrysene	ug/L	7	0	5.0	5.0	All	5.0	NA
Dibenzo(a,h)anthracene	ug/L	7	0	5.0	5.0	All	5.0	NA
Dibenzofuran	ug/L	7	0	5.0	5.0	All	5.0	NA
Diethyl Phthalate	ug/L	7	0	5.0	5.0	All	5.0	NA
Dimethyl Phthalate	ug/L	7	0	5.0	5.0	All	5.0	NA
Di-n-butylphthalate	ug/L	7	0	5.0	5.0	All	5.0	NA
Di-n-octylphthalate	ug/L	7	0	5.0	5.0	All	5.0	NA
Fluoranthene	ug/L	7	0	5.0	5.0	All	5.0	NA
Fluorene	ug/L	7	0	5.0	5.0	All	5.0	NA
Hexachlorobenzene	ug/L	7	0	5.0	5.0	All	5.0	NA
Hexachlorobutadiene	ug/L	7	0	5.0	5.0	All	5.0	NA
Hexachlorocyclopentadiene	ug/L	7	0	5.0	5.0	All	5.0	NA
Hexachloroethane	ug/L	7	0	5.0	5.0	All	5.0	NA
Indeno(1,2,3-cd)pyrene	ug/L	7	0	5.0	5.0	All	5.0	NA
Isophorone	ug/L	7	0	5.0	5.0	All	5.0	NA
Naphthalene	ug/L	7	0	5.0	5.0	All	5.0	NA
Nitrobenzene	ug/L	7	0	5.0	5.0	All	5.0	NA
N-Nitroso-di-n-propylamine	ug/L	7	0	5.0	5.0	All	5.0	NA
N-Nitrosodiphenylamine	ug/L	7	0	5.0	5.0	All	5.0	NA
Pentachlorophenol	ug/L	7	0	0.50	0.50	All	0.50	NA
Phenanthrene	ug/L	7	0	5.0	5.0	All	5.0	NA
Phenol	ug/L	7	1	1.0	5.0	All (except R6BU1W)	4.4	NA
Pyrene	ug/L	7	0	5.0	5.0	All	5.0	NA
Pesticides								
4,4'-DDD	ug/L	7	0	0.050	0.050	All	0.050	NA
4,4'-DDE	ug/L	7	0	0.050	0.050	All	0.050	NA
4,4'-DDT	ug/L	7	0	0.050	0.050	All	0.050	NA
Aldrin	ug/L	7	0	0.025	0.025	All	0.025	NA
alpha-BHC	ug/L	7	0	0.025	0.025	All	0.025	NA
alpha-Chlordane	ug/L	7	0	0.025	0.025	All	0.025	NA
beta-BHC	ug/L	7	0	0.025	0.025	All	0.025	NA
delta-BHC	ug/L	7	0	0.025	0.025	All	0.025	NA
Dieldrin	ug/L	7	0	0.050	0.050	All	0.050	NA
Endosulfan I	ug/L	7	0	0.025	0.025	All	0.025	NA
Endosulfan II	ug/L	7	0	0.050	0.050	All	0.050	NA
Endosulfan Sulfate	ug/L	7	0	0.050	0.050	All	0.050	NA
Endrin	ug/L	7	0	0.050	0.050	All	0.050	NA
Endrin Aldehyde	ug/L	7	0	0.050	0.050	All	0.050	NA
Endrin Ketone	ug/L	7	0	0.050	0.050	All	0.050	NA
gamma-BHC (Lindane)	ug/L	7	0	0.025	0.025	All	0.025	NA
gamma-Chlordane	ug/L	7	0	0.025	0.025	All	0.025	NA
Heptachlor	ug/L	7	0	0.025	0.025	All	0.025	NA
Heptachlor Epoxide	ug/L	7	0	0.025	0.025	All	0.025	NA
Methoxychlor	ug/L	7	0	0.25	0.25	All	0.25	NA
Toxaphene	ug/L	7	0	2.5	2.5	All	2.5	NA
Herbicides								
2,4-D	ug/L	7	6	0.25	1.0	R6AM1W	0.81	NA
2,4-DB	ug/L	7	0	0.25	0.25	All	0.25	NA
2,4,5-T	ug/L	7	0	0.25	0.25	All	0.25	NA
2,4,5-TP (Silvex)	ug/L	7	0	0.25	0.25	All	0.25	NA
Dalapon	ug/L	7	0	60	60	All	60	NA
Dicamba	ug/L	7	0	0.60	0.60	All	0.60	NA
Dichlorprop	ug/L	7	0	3.0	3.0	All	3.0	NA
Dinoseb	ug/L	7	0	5.0	5.0	All	5.0	NA
MCPA	ug/L	7	0	60	60	All	60	NA
MCPP	ug/L	7	0	60	60	All	60	NA

Table III-B9
Calculations for Risk Assessment Modeling
2002 River Surface Water (Downstream - Plot 6 - A, B C-Lines)
Sauget, IL

Analyte	Units	Downstream River Surface Water (Plot 6 - A, B, & C-Lines)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
PCBs								
Total PCBs	ug/L	7	0	0.25	0.25	All	0.25	NA
Dioxins/Furans								
TEQ	ug/L	1	0	0.0000027	0.0000027	R6BM1W	0.0000027	NA
Metals (total)								
Aluminum	mg/L	7	6	0.38	1.1	R6AU1W	0.81	NA
Antimony	mg/L	7	1	0.0051	0.010	All (except R6AU1W)	0.0093	NA
Arsenic	mg/L	7	3	0.0031	0.0053	R6AU1W	0.0045	NA
Barium	mg/L	7	7	0.060	0.063	R6BM1W	0.061	NA
Beryllium	mg/L	7	0	0.0020	0.0020	All	0.0020	NA
Cadmium	mg/L	7	0	0.0025	0.0025	All	0.0025	NA
Calcium	mg/L	7	7	46	51	R6BM1W	49	NA
Chromium	mg/L	7	0	0.0050	0.0050	All	0.0050	NA
Cobalt	mg/L	7	3	0.00076	0.0050	Various	0.0033	NA
Copper	mg/L	7	1	0.0025	0.010	All (except R6AD1W)	0.0089	NA
Iron	mg/L	7	7	1.0	1.4	R6AU1W	1.1	NA
Lead	mg/L	7	0	0.0025	0.0025	All	0.0025	NA
Magnesium	mg/L	7	7	18	20	R6BM1W/R6CM1W	19	NA
Manganese	mg/L	7	7	0.082	0.093	R6AU1W	0.085	NA
Mercury	mg/L	7	0	0.00010	0.00010	All	0.00010	NA
Nickel	mg/L	7	0	0.020	0.020	All	0.020	NA
Potassium	mg/L	7	7	3.5	3.7	R6BM1W	3.5	NA
Selenium	mg/L	7	0	0.0050	0.0050	All	0.0050	NA
Silver	mg/L	7	0	0.0050	0.0050	All	0.0050	NA
Sodium	mg/L	7	7	18	19	Various	19	NA
Thallium	mg/L	7	0	0.0050	0.0050	All	0.0050	NA
Vanadium	mg/L	7	1	0.0042	0.0050	All (except R6AD1W)	0.0049	NA
Zinc	mg/L	7	7	0.0049	0.0066	R6AU1W	0.0053	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B10
Calculations for Risk Assessment Modeling
2007 River Surface Water (Adjacent - All Sample Locations)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Sample Locations Except Plots 1 and 6)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
VOCs								
1,1,1-Trichloroethane	ug/L	5	0	0.50	0.50	All	0.50	NA
1,1,2,2-Tetrachloroethane	ug/L	5	0	0.50	0.50	All	0.50	NA
1,1,2-Trichloroethane	ug/L	5	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethane	ug/L	5	0	0.50	0.50	All	0.50	NA
1,1-Dichloroethylene	ug/L	5	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethane	ug/L	5	0	0.50	0.50	All	0.50	NA
1,2-Dichloroethene (total)	ug/L	5	0	1.0	1.0	All	1.0	NA
1,2-Dichloropropane	ug/L	5	0	0.50	0.50	All	0.50	NA
2-Butanone (MEK)	ug/L	5	0	5.0	5.0	All	5.0	NA
2-Hexanone	ug/L	5	0	5.0	5.0	All	5.0	NA
4-Methyl-2-pentanone (MIBK)	ug/L	5	0	5.0	5.0	All	5.0	NA
Acetone	ug/L	5	0	13	13	All	13	NA
Benzene	ug/L	5	0	0.50	0.50	All	0.50	NA
Bromodichloromethane	ug/L	5	0	0.50	0.50	All	0.50	NA
Bromoform	ug/L	5	0	0.50	0.50	All	0.50	NA
Bromomethane	ug/L	5	0	0.50	0.50	All	0.50	NA
Carbon Disulfide	ug/L	5	0	1.0	1.0	All	1.0	NA
Carbon Tetrachloride	ug/L	5	0	0.50	0.50	All	0.50	NA
Chlorobenzene	ug/L	5	0	0.50	0.50	All	0.50	NA
Chloroethane	ug/L	5	0	0.50	0.50	All	0.50	NA
Chloroform	ug/L	5	0	0.50	0.50	All	0.50	NA
Chloromethane	ug/L	5	0	0.50	0.50	All	0.50	NA
cis-1,3-Dichloropropene	ug/L	5	0	0.50	0.50	All	0.50	NA
Dibromochloromethane	ug/L	5	0	0.50	0.50	All	0.50	NA
Ethylbenzene	ug/L	5	0	0.50	0.50	All	0.50	NA
Methylene Chloride	ug/L	5	0	2.5	2.5	All	2.5	NA
Styrene (Monomer)	ug/L	5	0	0.50	0.50	All	0.50	NA
Tetrachloroethene	ug/L	5	0	0.50	0.50	All	0.50	NA
Toluene	ug/L	5	0	0.50	0.50	All	0.50	NA
trans-1,3-Dichloropropene	ug/L	5	0	0.50	0.50	All	0.50	NA
Trichloroethylene	ug/L	5	0	0.50	0.50	All	0.50	NA
Vinyl chloride	ug/L	5	0	0.50	0.50	All	0.50	NA
Xylenes, Total	ug/L	5	0	1.0	1.0	All	1.0	NA
SVOCs								
1,2,4-Trichlorobenzene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
1,2-Dichlorobenzene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
1,3-Dichlorobenzene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
1,4-Dichlorobenzene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
2,2'-Oxybis(1-Chloropropane)	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
2,4,5-Trichlorophenol	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
2,4,6-Trichlorophenol	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
2,4-Dichlorophenol	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
2,4-Dimethylphenol	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
2,4-Dinitrophenol	ug/L	5	0	24	25	Various	24	NA
2,4-Dinitrotoluene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
2,6-Dinitrotoluene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
2-Chloronaphthalene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
2-Chlorophenol	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
2-Methylnaphthalene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
2-Methylphenol (o-Cresol)	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
2-Nitroaniline	ug/L	5	0	24	25	Various	24	NA
2-Nitrophenol	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
3,3'-Dichlorobenzidine	ug/L	5	0	9.5	10	SW-SA2-GMCS-4	9.6	NA
3/4-Methylphenol (m&p-Cresol)	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
3-Nitroaniline	ug/L	5	0	24	25	Various	24	NA
4,6-Dinitro-2-methylphenol	ug/L	5	0	24	25	Various	24	NA
4-Bromophenyl Phenyl Ether	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
4-Chloro-3-methylphenol	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
4-Chloroaniline	ug/L	5	0	9.5	10	SW-SA2-GMCS-4	9.6	NA
4-Chlorophenyl Phenyl Ether	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
4-Nitroaniline	ug/L	5	0	24	25	Various	24	NA
4-Nitrophenol	ug/L	5	0	24	25	Various	24	NA
Acenaphthene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Acenaphthylene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Anthracene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA

Table III-B10
Calculations for Risk Assessment Modeling
2007 River Surface Water (Adjacent - All Sample Locations)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Sample Locations Except Plots 1 and 6)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
Benzo(a)anthracene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Benzo(a)pyrene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Benzo(b)fluoranthene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Benzo(g,h,i)perylene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Benzo(k)fluoranthene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
bis(2-Chloroethoxy)methane	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
bis(2-Chloroethyl)ether	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
bis(2-Ethylhexyl)phthalate	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Butyl Benzyl Phthalate	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Carbazole	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Chrysene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Dibenzo(a,h)anthracene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Dibenzofuran	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Diethyl Phthalate	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Dimethyl Phthalate	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Di-n-butylphthalate	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Di-n-octylphthalate	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Fluoranthene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Fluorene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Hexachlorobenzene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Hexachlorobutadiene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Hexachlorocyclopentadiene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Hexachloroethane	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Indeno(1,2,3-cd)pyrene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Isophorone	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Naphthalene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Nitrobenzene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
N-Nitroso-di-n-propylamine	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
N-Nitrosodiphenylamine	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Pentachlorophenol	ug/L	5	0	0.12	0.13	Various	0.12	NA
Phenanthrene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Phenol	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Pyrene	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
Pesticides								
4,4'-DDD	ug/L	5	0	0.048	0.049	Various	0.049	NA
4,4'-DDE	ug/L	5	0	0.048	0.049	Various	0.049	NA
4,4'-DDT	ug/L	5	0	0.048	0.049	Various	0.049	NA
Aldrin	ug/L	5	0	0.024	0.025	All (except SW-SA2-GMCS-3)	0.024	NA
alpha-BHC	ug/L	5	0	0.024	0.025	All (except SW-SA2-GMCS-3)	0.024	NA
alpha-Chlordane	ug/L	5	0	0.024	0.025	All (except SW-SA2-GMCS-3)	0.024	NA
beta-BHC	ug/L	5	0	0.024	0.025	All (except SW-SA2-GMCS-3)	0.024	NA
delta-BHC	ug/L	5	0	0.024	0.025	All (except SW-SA2-GMCS-3)	0.024	NA
Dieldrin	ug/L	5	0	0.048	0.049	Various	0.049	NA
Endosulfan I	ug/L	5	0	0.024	0.025	All (except SW-SA2-GMCS-3)	0.024	NA
Endosulfan II	ug/L	5	0	0.048	0.049	Various	0.049	NA
Endosulfan Sulfate	ug/L	5	0	0.048	0.049	Various	0.049	NA
Endrin	ug/L	5	0	0.048	0.049	Various	0.049	NA
Endrin Aldehyde	ug/L	5	0	0.048	0.049	Various	0.049	NA
Endrin Ketone	ug/L	5	0	0.048	0.049	Various	0.049	NA
gamma-BHC (Lindane)	ug/L	5	0	0.024	0.025	All (except SW-SA2-GMCS-3)	0.024	NA
gamma-Chlordane	ug/L	5	0	0.024	0.025	All (except SW-SA2-GMCS-3)	0.024	NA
Heptachlor	ug/L	5	0	0.024	0.025	All (except SW-SA2-GMCS-3)	0.024	NA
Heptachlor Epoxide	ug/L	5	0	0.024	0.025	All (except SW-SA2-GMCS-3)	0.024	NA
Methoxychlor	ug/L	5	0	0.24	0.25	All (except SW-SA2-GMCS-3)	0.24	NA
Toxaphene	ug/L	5	0	2.4	2.5	All (except SW-SA2-GMCS-3)	2.4	NA
Herbicides								
2,4-D	ug/L	5	0	0.25	0.25	SW-SA2-GMCS-2/SW-SA2-GMCS-9	0.25	NA
2,4-DB	ug/L	5	0	0.25	0.25	SW-SA2-GMCS-2/SW-SA2-GMCS-9	0.25	NA
2,4,5-T	ug/L	5	0	0.25	0.25	SW-SA2-GMCS-2/SW-SA2-GMCS-9	0.25	NA
2,4,5-TP (Silvex)	ug/L	5	0	0.25	0.25	SW-SA2-GMCS-2/SW-SA2-GMCS-9	0.25	NA
Dalapon	ug/L	5	0	4.9	5.0	SW-SA2-GMCS-9	4.9	NA
Dicamba	ug/L	5	0	0.25	0.25	SW-SA2-GMCS-2/SW-SA2-GMCS-9	0.25	NA
Dichlorprop	ug/L	5	5	0.095	0.16	SW-SA2-GMCS-4	0.12	NA
Dinoseb	ug/L	5	0	4.7	4.9	SW-SA2-GMCS-4	4.8	NA
MCPA	ug/L	5	0	60	60	All	60	NA
MCPP	ug/L	5	0	60	60	All	60	NA

Table III-B10
Calculations for Risk Assessment Modeling
2007 River Surface Water (Adjacent - All Sample Locations)
Sauget, IL

Analyte	Units	Adjacent River Surface Water (All Sample Locations Except Plots 1 and 6)						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Metals (dissolved)								
Aluminum	mg/L	5	1	0.030	0.10	All (except SW-SA2-GMCS-9)	0.086	NA
Antimony	mg/L	5	0	0.010	0.010	All	0.010	NA
Arsenic	mg/L	5	0	0.0050	0.0050	All	0.0050	NA
Barium	mg/L	5	5	0.064	0.066	SW-SA2-GMCS-4/SW-SA2-GMCS-5	0.065	NA
Beryllium	mg/L	5	0	0.0020	0.0020	All	0.0020	NA
Cadmium	mg/L	5	0	0.0025	0.0025	All	0.0025	NA
Calcium	mg/L	5	5	58	59	SW-SA2-GMCS-5/SW-SA2-GMCS-9	58	NA
Chromium	mg/L	5	0	0.0050	0.0050	All	0.0050	NA
Cobalt	mg/L	5	0	0.0050	0.0050	All	0.0050	NA
Copper	mg/L	5	0	0.0018	0.0020	SW-SA2-GMCS-9	0.0019	NA
Iron	mg/L	5	5	0.030	0.092	SW-SA2-GMCS-9	0.045	NA
Lead	mg/L	5	0	0.0025	0.0025	All	0.0025	NA
Magnesium	mg/L	5	5	21	21	All	21	NA
Manganese	mg/L	5	0	0.0050	0.0050	All	0.0050	NA
Mercury	mg/L	5	0	0.00010	0.00010	All	0.00010	NA
Nickel	mg/L	5	2	0.0021	0.020	Various	0.013	NA
Potassium	mg/L	5	5	4.5	4.6	SW-SA2-GMCS-4/SW-SA2-GMCS-5	4.5	NA
Selenium	mg/L	5	0	0.0050	0.0050	All	0.0050	NA
Silver	mg/L	5	0	0.0050	0.0050	All	0.0050	NA
Sodium	mg/L	5	5	32	34	SW-SA2-GMCS-5/SW-SA2-GMCS-9	33	NA
Thallium	mg/L	5	0	0.013	0.013	All	0.013	NA
Vanadium	mg/L	5	5	0.0020	0.0026	SW-SA2-GMCS-3	0.0023	NA
Zinc	mg/L	5	0	0.0025	0.0034	SW-SA2-GMCS-5	0.0030	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B11
Calculations for Risk Assessment Modeling
Upstream River Whole-Body Fish Tissue (Mink Modeling)
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Upstream Mississippi River						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	3	0	255	255	All	255	NA
1,2-Dichlorobenzene	ug/kg	3	0	255	255	All	255	NA
1,3-Dichlorobenzene	ug/kg	3	0	255	255	All	255	NA
1,4-Dichlorobenzene	ug/kg	3	0	255	255	All	255	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	3	0	255	255	All	255	NA
2,4,5-Trichlorophenol	ug/kg	3	0	255	255	All	255	NA
2,4,6-Trichlorophenol	ug/kg	3	0	255	255	All	255	NA
2,4-Dichlorophenol	ug/kg	3	0	255	255	All	255	NA
2,4-Dimethylphenol	ug/kg	3	0	255	255	All	255	NA
2,4-Dinitrophenol	ug/kg	3	0	1250	1250	All	1250	NA
2,4-Dinitrotoluene	ug/kg	3	0	255	255	All	255	NA
2,6-Dinitrotoluene	ug/kg	3	0	255	255	All	255	NA
2-Chloronaphthalene	ug/kg	3	0	255	255	All	255	NA
2-Chlorophenol	ug/kg	3	0	255	255	All	255	NA
2-Methylnaphthalene	ug/kg	3	0	255	255	All	255	NA
2-Methylphenol (o-Cresol)	ug/kg	3	1	110	255	All (except 15)	207	NA
2-Nitroaniline	ug/kg	3	0	1250	1250	All	1250	NA
2-Nitrophenol	ug/kg	3	0	255	255	All	255	NA
3,3'-Dichlorobenzidine	ug/kg	3	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	3	0	255	255	All	255	NA
3-Nitroaniline	ug/kg	3	0	1250	1250	All	1250	NA
4,6-Dinitro-2-methylphenol	ug/kg	3	0	1250	1250	All	1250	NA
4-Bromophenyl Phenyl Ether	ug/kg	3	0	255	255	All	255	NA
4-Chloro-3-methylphenol	ug/kg	3	0	255	255	All	255	NA
4-Chloroaniline	ug/kg	3	0	495	495	All	495	NA
4-Chlorophenyl Phenyl Ether	ug/kg	3	0	255	255	All	255	NA
4-Nitroaniline	ug/kg	3	0	1250	1250	All	1250	NA
4-Nitrophenol	ug/kg	3	0	1250	1250	All	1250	NA
Acenaphthene	ug/kg	3	0	255	255	All	255	NA
Acenaphthylene	ug/kg	3	0	255	255	All	255	NA
Anthracene	ug/kg	3	0	255	255	All	255	NA
Benzo(a)anthracene	ug/kg	3	0	255	255	All	255	NA
Benzo(a)pyrene	ug/kg	3	0	255	255	All	255	NA
Benzo(b)fluoranthene	ug/kg	3	0	255	255	All	255	NA
Benzo(g,h,i)perylene	ug/kg	3	0	255	255	All	255	NA
Benzo(k)fluoranthene	ug/kg	3	0	255	255	All	255	NA
bis(2-Chloroethoxy)methane	ug/kg	3	0	255	255	All	255	NA
bis(2-Chloroethyl)ether	ug/kg	3	0	255	255	All	255	NA
bis(2-Ethylhexyl)phthalate	ug/kg	3	0	255	255	All	255	NA
Butyl Benzyl Phthalate	ug/kg	3	0	255	255	All	255	NA
Carbazole	ug/kg	3	0	255	255	All	255	NA
Chrysene	ug/kg	3	0	255	255	All	255	NA
Dibenzo(a,h)anthracene	ug/kg	3	0	255	255	All	255	NA
Dibenzofuran	ug/kg	3	0	255	255	All	255	NA
Diethyl Phthalate	ug/kg	3	1	110	255	All (except 14)	207	NA
Dimethyl Phthalate	ug/kg	3	0	255	255	All	255	NA
Di-n-butylphthalate	ug/kg	3	0	255	255	All	255	NA
Di-n-octylphthalate	ug/kg	3	0	255	255	All	255	NA
Fluoranthene	ug/kg	3	0	255	255	All	255	NA
Fluorene	ug/kg	3	0	255	255	All	255	NA
Hexachlorobenzene	ug/kg	3	0	255	255	All	255	NA
Hexachlorobutadiene	ug/kg	3	0	255	255	All	255	NA
Hexachlorocyclopentadiene	ug/kg	3	0	255	255	All	255	NA
Hexachloroethane	ug/kg	3	0	255	255	All	255	NA
Indeno(1,2,3-cd)pyrene	ug/kg	3	0	255	255	All	255	NA
Isophorone	ug/kg	3	0	255	255	All	255	NA
Naphthalene	ug/kg	3	0	255	255	All	255	NA
Nitrobenzene	ug/kg	3	0	255	255	All	255	NA
N-Nitroso-di-n-propylamine	ug/kg	3	0	255	255	All	255	NA
N-Nitrosodiphenylamine	ug/kg	3	0	255	255	All	255	NA
Pentachlorophenol	ug/kg	3	0	1250	1250	All	1250	NA
Phenanthrene	ug/kg	3	0	255	255	All	255	NA
Phenol	ug/kg	3	0	255	255	All	255	NA
Pyrene	ug/kg	3	0	255	255	All	255	NA

Table III-B11
Calculations for Risk Assessment Modeling
Upstream River Whole-Body Fish Tissue (Mink Modeling)
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Upstream Mississippi River						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	3	0	13	25	13	17	NA
4,4'-DDE	ug/kg	3	2	13	25	13	21	NA
4,4'-DDT	ug/kg	3	1	7.6	25	13	15	NA
Aldrin	ug/kg	3	0	13	25	13	17	NA
alpha-BHC	ug/kg	3	0	13	25	13	17	NA
alpha-Chlordane	ug/kg	3	0	13	25	13	17	NA
beta-BHC	ug/kg	3	0	13	25	13	17	NA
delta-BHC	ug/kg	3	0	13	25	13	17	NA
Dieldrin	ug/kg	3	2	6.7	32	14	21	NA
Endosulfan I	ug/kg	3	1	3.0	25	13	14	NA
Endosulfan II	ug/kg	3	0	13	25	13	17	NA
Endosulfan Sulfate	ug/kg	3	0	13	25	13	17	NA
Endrin	ug/kg	3	0	13	25	13	17	NA
Endrin Aldehyde	ug/kg	3	2	5.1	25	13	13	NA
Endrin Ketone	ug/kg	3	0	13	25	13	17	NA
gamma-BHC (Lindane)	ug/kg	3	0	13	25	13	17	NA
gamma-Chlordane	ug/kg	3	1	5.8	25	13	14	NA
Heptachlor	ug/kg	3	0	13	25	13	17	NA
Heptachlor Epoxide	ug/kg	3	0	13	25	13	17	NA
Methoxychlor	ug/kg	3	0	50	100	13	67	NA
Toxaphene	ug/kg	3	0	425	850	13	567	NA
Herbicides								
2,4-D	ug/kg	3	0	4.2	4.2	All	4.2	NA
2,4-DB	ug/kg	3	0	4.2	4.2	All	4.2	NA
2,4,5-T	ug/kg	3	1	4.2	7.1	14	5.1	NA
2,4,5-TP (Silvex)	ug/kg	3	1	4.2	7.5	14	5.3	NA
Dalapon	ug/kg	3	0	1000	1000	All	1000	NA
Dicamba	ug/kg	3	2	5.2	10	15	7.2	NA
Dichlorprop	ug/kg	3	0	50	50	All	50	NA
Dinoseb	ug/kg	3	0	50	50	All	50	NA
MCPA	ug/kg	3	0	1000	1000	All	1000	NA
MCPP	ug/kg	3	0	1000	1000	All	1000	NA
PCBs								
Total PCBs	ug/kg	3	0	25	25	All	25	NA
Dioxins/Furans								
TEQ	pg/g	3	3	0.47	3.0	15	1.8	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.
Calculations for river fish metals concentrations are presented in Table III-B10

Upstream Sample IDs:
13 = UDA Channel Catfish-Comp#1
14 = UDA Drum Comp
15 = UDA-UE Comp Shad

Table III-B11
Calculations for Risk Assessment Modeling
Adjacent River Whole-Body Fish Tissue (Mink Modeling)
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Adjacent Mississippi River						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	9	0	255	255	All	255	NA
1,2-Dichlorobenzene	ug/kg	9	4	140	255	Various	228	NA
1,3-Dichlorobenzene	ug/kg	9	0	255	255	All	255	NA
1,4-Dichlorobenzene	ug/kg	9	1	130	255	All (except 9)	241	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	9	0	255	255	All	255	NA
2,4,5-Trichlorophenol	ug/kg	9	0	255	255	All	255	NA
2,4,6-Trichlorophenol	ug/kg	9	0	255	255	All	255	NA
2,4-Dichlorophenol	ug/kg	9	3	140	255	Various	227	NA
2,4-Dimethylphenol	ug/kg	9	0	255	255	All	255	NA
2,4-Dinitrophenol	ug/kg	9	0	1250	1250	All	1250	NA
2,4-Dinitrotoluene	ug/kg	9	0	255	255	All	255	NA
2,6-Dinitrotoluene	ug/kg	9	0	255	255	All	255	NA
2-Chloronaphthalene	ug/kg	9	0	255	255	All	255	NA
2-Chlorophenol	ug/kg	9	0	255	255	All	255	NA
2-Methylnaphthalene	ug/kg	9	0	255	255	All	255	NA
2-Methylphenol (o-Cresol)	ug/kg	9	4	140	255	Various	222	NA
2-Nitroaniline	ug/kg	9	0	1250	1250	All	1250	NA
2-Nitrophenol	ug/kg	9	0	255	255	All	255	NA
3,3'-Dichlorobenzidine	ug/kg	9	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	9	0	255	255	All	255	NA
3-Nitroaniline	ug/kg	9	0	1250	1250	All	1250	NA
4,6-Dinitro-2-methylphenol	ug/kg	9	0	1250	1250	All	1250	NA
4-Bromophenyl Phenyl Ether	ug/kg	9	0	255	255	All	255	NA
4-Chloro-3-methylphenol	ug/kg	9	0	255	255	All	255	NA
4-Chloroaniline	ug/kg	9	0	495	495	All	495	NA
4-Chlorophenyl Phenyl Ether	ug/kg	9	0	255	255	All	255	NA
4-Nitroaniline	ug/kg	9	0	1250	1250	All	1250	NA
4-Nitrophenol	ug/kg	9	0	1250	1250	All	1250	NA
Acenaphthene	ug/kg	9	0	255	255	All	255	NA
Acenaphthylene	ug/kg	9	0	255	255	All	255	NA
Anthracene	ug/kg	9	0	255	255	All	255	NA
Benzo(a)anthracene	ug/kg	9	0	255	255	All	255	NA
Benzo(a)pyrene	ug/kg	9	0	255	255	All	255	NA
Benzo(b)fluoranthene	ug/kg	9	0	255	255	All	255	NA
Benzo(g,h,i)perylene	ug/kg	9	0	255	255	All	255	NA
Benzo(k)fluoranthene	ug/kg	9	0	255	255	All	255	NA
bis(2-Chloroethoxy)methane	ug/kg	9	0	255	255	All	255	NA
bis(2-Chloroethyl)ether	ug/kg	9	0	255	255	All	255	NA
bis(2-Ethylhexyl)phthalate	ug/kg	9	0	255	255	All	255	NA
Butyl Benzyl Phthalate	ug/kg	9	0	255	255	All	255	NA
Carbazole	ug/kg	9	0	255	255	All	255	NA
Chrysene	ug/kg	9	0	255	255	All	255	NA
Dibenzo(a,h)anthracene	ug/kg	9	0	255	255	All	255	NA
Dibenzofuran	ug/kg	9	0	255	255	All	255	NA
Diethyl Phthalate	ug/kg	9	0	255	255	All	255	NA
Dimethyl Phthalate	ug/kg	9	0	255	255	All	255	NA
Di-n-butylphthalate	ug/kg	9	0	255	255	All	255	NA
Di-n-octylphthalate	ug/kg	9	0	255	255	All	255	NA
Fluoranthene	ug/kg	9	0	255	255	All	255	NA
Fluorene	ug/kg	9	0	255	255	All	255	NA
Hexachlorobenzene	ug/kg	9	0	255	255	All	255	NA
Hexachlorobutadiene	ug/kg	9	0	255	255	All	255	NA
Hexachlorocyclopentadiene	ug/kg	9	0	255	255	All	255	NA
Hexachloroethane	ug/kg	9	0	255	255	All	255	NA
Indeno(1,2,3-cd)pyrene	ug/kg	9	0	255	255	All	255	NA
Isophorone	ug/kg	9	0	255	255	All	255	NA
Naphthalene	ug/kg	9	0	255	255	All	255	NA
Nitrobenzene	ug/kg	9	0	255	255	All	255	NA
N-Nitroso-di-n-propylamine	ug/kg	9	0	255	255	All	255	NA
N-Nitrosodiphenylamine	ug/kg	9	0	255	255	All	255	NA
Pentachlorophenol	ug/kg	9	0	1250	1250	All	1250	NA
Phenanthrene	ug/kg	9	0	255	255	All	255	NA
Phenol	ug/kg	9	0	255	255	All	255	NA
Pyrene	ug/kg	9	0	255	255	All	255	NA

Table III-B11
Calculations for Risk Assessment Modeling
Adjacent River Whole-Body Fish Tissue (Mink Modeling)
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Adjacent Mississippi River						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	9	2	6.6	13	Various	11	NA
4,4'-DDE	ug/kg	9	8	5.4	60	12	18	NA
4,4'-DDT	ug/kg	9	1	13	13	12	13	NA
Aldrin	ug/kg	9	0	13	13	All	13	NA
alpha-BHC	ug/kg	9	1	2.6	13	All (except 7)	11	NA
alpha-Chlordane	ug/kg	9	2	3.8	14	12	12	NA
beta-BHC	ug/kg	9	0	13	13	All	13	NA
delta-BHC	ug/kg	9	0	13	13	All	13	NA
Dieldrin	ug/kg	9	7	4.3	64	12	15	NA
Endosulfan I	ug/kg	9	1	4.3	13	All (except 12)	12	NA
Endosulfan II	ug/kg	9	0	13	13	All	13	NA
Endosulfan Sulfate	ug/kg	9	0	13	13	All	13	NA
Endrin	ug/kg	9	2	7.5	15	5	12	NA
Endrin Aldehyde	ug/kg	9	2	6.4	13	Various	12	NA
Endrin Ketone	ug/kg	9	0	13	13	All	13	NA
gamma-BHC (Lindane)	ug/kg	9	0	13	13	All	13	NA
gamma-Chlordane	ug/kg	9	2	3.4	13	Various	11	NA
Heptachlor	ug/kg	9	0	13	13	All	13	NA
Heptachlor Epoxide	ug/kg	9	2	3.4	13	Various	11	NA
Methoxychlor	ug/kg	9	0	50	50	All	50	NA
Toxaphene	ug/kg	9	0	425	425	All	425	NA
Herbicides								
2,4-D	ug/kg	9	0	4.2	4.2	All	4.2	NA
2,4-DB	ug/kg	9	0	4.2	4.2	All	4.2	NA
2,4,5-T	ug/kg	9	3	4.2	13	10	5.7	NA
2,4,5-TP (Silvex)	ug/kg	9	5	3.3	8.7	8	4.9	NA
Dalapon	ug/kg	9	0	1000	1000	All	1000	NA
Dicamba	ug/kg	9	0	10	10	All	10	NA
Dichlorprop	ug/kg	9	0	50	50	All	50	NA
Dinoseb	ug/kg	9	0	50	50	All	50	NA
MCPA	ug/kg	9	0	1000	1000	All	1000	NA
MCPP	ug/kg	9	3	1000	8600	5	2300	NA
PCBs								
Total PCBs	ug/kg	9	0	25	25	All	25	NA
Dioxins/Furans								
TEQ	pg/g	9	9	0.20	3.5	8	1.5	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.
Calculations for river fish metals concentrations are presented in Table III-B10

Adjacent Sample IDs:
5 = PDA Channel Catfish-Comp#2
7 = PDA Comp#1 Shad
8 = PDA Comp#2 Shad
9 = PDA Comp#3 Shad
10 = PDA Drum Comp#1
12 = PDA Drum-Comp#4

Table III-B11
Calculations for Risk Assessment Modeling
Downstream River Whole-Body Fish Tissue (Mink Modeling)
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Downstream Mississippi River						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	3	0	255	255	All	255	NA
1,2-Dichlorobenzene	ug/kg	3	0	255	255	All	255	NA
1,3-Dichlorobenzene	ug/kg	3	0	255	255	All	255	NA
1,4-Dichlorobenzene	ug/kg	3	0	255	255	All	255	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	3	0	255	255	All	255	NA
2,4,5-Trichlorophenol	ug/kg	3	0	255	255	All	255	NA
2,4,6-Trichlorophenol	ug/kg	3	0	255	255	All	255	NA
2,4-Dichlorophenol	ug/kg	3	0	255	255	All	255	NA
2,4-Dimethylphenol	ug/kg	3	0	255	255	All	255	NA
2,4-Dinitrophenol	ug/kg	3	0	1250	1250	All	1250	NA
2,4-Dinitrotoluene	ug/kg	3	0	255	255	All	255	NA
2,6-Dinitrotoluene	ug/kg	3	0	255	255	All	255	NA
2-Chloronaphthalene	ug/kg	3	0	255	255	All	255	NA
2-Chlorophenol	ug/kg	3	0	255	255	All	255	NA
2-Methylnaphthalene	ug/kg	3	0	255	255	All	255	NA
2-Methylphenol (o-Cresol)	ug/kg	3	3	290	340	1	317	NA
2-Nitroaniline	ug/kg	3	0	1250	1250	All	1250	NA
2-Nitrophenol	ug/kg	3	0	255	255	All	255	NA
3,3'-Dichlorobenzidine	ug/kg	3	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	3	0	255	255	All	255	NA
3-Nitroaniline	ug/kg	3	0	1250	1250	All	1250	NA
4,6-Dinitro-2-methylphenol	ug/kg	3	0	1250	1250	All	1250	NA
4-Bromophenyl Phenyl Ether	ug/kg	3	0	255	255	All	255	NA
4-Chloro-3-methylphenol	ug/kg	3	0	255	255	All	255	NA
4-Chloroaniline	ug/kg	3	0	495	495	All	495	NA
4-Chlorophenyl Phenyl Ether	ug/kg	3	0	255	255	All	255	NA
4-Nitroaniline	ug/kg	3	0	1250	1250	All	1250	NA
4-Nitrophenol	ug/kg	3	0	1250	1250	All	1250	NA
Acenaphthene	ug/kg	3	0	255	255	All	255	NA
Acenaphthylene	ug/kg	3	0	255	255	All	255	NA
Anthracene	ug/kg	3	0	255	255	All	255	NA
Benzo(a)anthracene	ug/kg	3	0	255	255	All	255	NA
Benzo(a)pyrene	ug/kg	3	0	255	255	All	255	NA
Benzo(b)fluoranthene	ug/kg	3	0	255	255	All	255	NA
Benzo(g,h,i)perylene	ug/kg	3	0	255	255	All	255	NA
Benzo(k)fluoranthene	ug/kg	3	0	255	255	All	255	NA
bis(2-Chloroethoxy)methane	ug/kg	3	0	255	255	All	255	NA
bis(2-Chloroethyl)ether	ug/kg	3	0	255	255	All	255	NA
bis(2-Ethylhexyl)phthalate	ug/kg	3	0	255	255	All	255	NA
Butyl Benzyl Phthalate	ug/kg	3	0	255	255	All	255	NA
Carbazole	ug/kg	3	0	255	255	All	255	NA
Chrysene	ug/kg	3	0	255	255	All	255	NA
Dibenzo(a,h)anthracene	ug/kg	3	0	255	255	All	255	NA
Dibenzofuran	ug/kg	3	0	255	255	All	255	NA
Diethyl Phthalate	ug/kg	3	0	255	255	All	255	NA
Dimethyl Phthalate	ug/kg	3	0	255	255	All	255	NA
Di-n-butylphthalate	ug/kg	3	0	255	255	All	255	NA
Di-n-octylphthalate	ug/kg	3	0	255	255	All	255	NA
Fluoranthene	ug/kg	3	0	255	255	All	255	NA
Fluorene	ug/kg	3	0	255	255	All	255	NA
Hexachlorobenzene	ug/kg	3	0	255	255	All	255	NA
Hexachlorobutadiene	ug/kg	3	0	255	255	All	255	NA
Hexachlorocyclopentadiene	ug/kg	3	0	255	255	All	255	NA
Hexachloroethane	ug/kg	3	0	255	255	All	255	NA
Indeno(1,2,3-cd)pyrene	ug/kg	3	0	255	255	All	255	NA
Isophorone	ug/kg	3	0	255	255	All	255	NA
Naphthalene	ug/kg	3	0	255	255	All	255	NA
Nitrobenzene	ug/kg	3	0	255	255	All	255	NA
N-Nitroso-di-n-propylamine	ug/kg	3	0	255	255	All	255	NA
N-Nitrosodiphenylamine	ug/kg	3	0	255	255	All	255	NA
Pentachlorophenol	ug/kg	3	0	1250	1250	All	1250	NA
Phenanthrene	ug/kg	3	0	255	255	All	255	NA
Phenol	ug/kg	3	0	255	255	All	255	NA
Pyrene	ug/kg	3	0	255	255	All	255	NA

Table III-B11
Calculations for Risk Assessment Modeling
Downstream River Whole-Body Fish Tissue (Mink Modeling)
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Downstream Mississippi River						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	3	1	12	25	1	17	NA
4,4'-DDE	ug/kg	3	3	5.2	19	3	13	NA
4,4'-DDT	ug/kg	3	0	13	25	1	17	NA
Aldrin	ug/kg	3	0	13	25	1	17	NA
alpha-BHC	ug/kg	3	0	13	25	1	17	NA
alpha-Chlordane	ug/kg	3	1	7.7	12.5	All (except 1)	11	NA
beta-BHC	ug/kg	3	0	13	25	1	17	NA
delta-BHC	ug/kg	3	0	13	25	1	17	NA
Dieldrin	ug/kg	3	3	8.8	19	1	14	NA
Endosulfan I	ug/kg	3	0	13	25	1	17	NA
Endosulfan II	ug/kg	3	0	13	25	1	17	NA
Endosulfan Sulfate	ug/kg	3	1	12	25	1	17	NA
Endrin	ug/kg	3	0	13	25	1	17	NA
Endrin Aldehyde	ug/kg	3	1	4.9	25	1	14	NA
Endrin Ketone	ug/kg	3	0	13	25	1	17	NA
gamma-BHC (Lindane)	ug/kg	3	0	13	25	1	17	NA
gamma-Chlordane	ug/kg	3	1	3.5	25	1	14	NA
Heptachlor	ug/kg	3	0	13	25	1	17	NA
Heptachlor Epoxide	ug/kg	3	0	13	25	1	17	NA
Methoxychlor	ug/kg	3	0	50	100	1	67	NA
Toxaphene	ug/kg	3	0	425	850	1	567	NA
Herbicides								
2,4-D	ug/kg	3	0	4.2	4.2	All	4.2	NA
2,4-DB	ug/kg	3	0	4.2	4.2	All	4.2	NA
2,4,5-T	ug/kg	3	0	4.2	4.2	All	4.2	NA
2,4,5-TP (Silvex)	ug/kg	3	2	3.9	6.9	3	5.0	NA
Dalapon	ug/kg	3	0	1000	1000	All	1000	NA
Dicamba	ug/kg	3	0	10	10	All	10	NA
Dichlorprop	ug/kg	3	0	50	50	All	50	NA
Dinoseb	ug/kg	3	0	50	50	All	50	NA
MCPA	ug/kg	3	0	1000	1000	All	1000	NA
MCPP	ug/kg	3	0	1000	1000	All	1000	NA
PCBs								
Total PCBs	ug/kg	3	0	25	25	All	25	NA
Dioxins/Furans								
TEQ	pg/g	3	3	0.19	3.3	1	1.5	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.
Calculations for river fish metals concentrations are presented in Table III-B10

Downstream Sample IDs:
1 = DDA Channel Catfish-Comp#1
3 = DDA Drum-Comp#1

Table III-B12
Calculations for Risk Assessment Modeling
River Whole-Body Fish Tissue (Metals Calculations)
2002 Mink Modeling
Sauget, IL

	Upstream			Adjacent			Downstream		
Metal (mg/kg)	Surface Water Value	BCF	Adjusted Fish Concentration	Surface Water Value	BCF	Adjusted Fish Concentration	Surface Water Value	BCF	Adjusted Fish Concentration
Aluminum	6.6E-01	2.7	1.8E+00	7.9E-01	2.7	2.1E+00	8.1E-01	2.7	2.2E+00
Antimony	***1.0E-02***	40	***4.0E-01***	***1.0E-02***	40	***4.0E-01***	8.8E-03	40	3.5E-01
Arsenic	***5.0E-03***	114	***5.7E-01***	5.0E-03	114	5.7E-01	5.1E-03	114	5.8E-01
Barium	5.8E-02	633	3.7E+01	6.2E-02	633	3.9E+01	6.1E-02	633	3.8E+01
Beryllium	***2.0E-03***	62	***1.2E-01***	***2.0E-03***	62	***1.2E-01***	***2.0E-03***	62	***1.2E-01***
Cadmium	***2.5E-03***	907	***2.3E+00***	***2.5E-03***	907	***2.3E+00***	***2.5E-03***	907	***2.3E+00***
Chromium	***5.0E-03***	19	***9.5E-02***	***5.0E-03***	19	***9.5E-02***	***5.0E-03***	19	***9.5E-02***
Cobalt	3.7E-03	1734	6.4E+00	***5.0E-03***	1734	***8.7E+00***	3.0E-03	1734	5.2E+00
Copper	***1.0E-02***	710	***7.1E+00***	***9.6E-03***	710	***6.8E+00***	8.1E-03	710	5.8E+00
Lead	***2.5E-03***	0.090	***2.3E-04***	2.5E-03	0.090	2.3E-04	***2.5E-03***	0.090	***2.3E-04***
Manganese	8.1E-02	1734	1.4E+02	9.4E-02	1734	1.6E+02	8.6E-02	1734	1.5E+02
Mercury	***1.0E-04***	11168	***1.1E+00***	1.0E-04	11168	1.1E+00	***1.0E-04***	11168	***1.1E+00***
Nickel	***2.0E-02***	78	***1.6E+00***	***2.0E-02***	78	***1.6E+00***	***2.0E-02***	78	***1.6E+00***
Selenium	***5.0E-03***	129	***6.5E-01***	***5.0E-03***	129	***6.5E-01***	***5.0E-03***	129	***6.5E-01***
Silver	***5.0E-03***	88	***4.4E-01***	***5.0E-03***	88	***4.4E-01***	***5.0E-03***	88	***4.4E-01***
Thallium	***5.0E-03***	10000	***5.0E+01***	***5.0E-03***	10000	***5.0E+01***	***5.0E-03***	10000	***5.0E+01***
Vanadium	***5.0E-03***	1734	***8.7E+00***	4.9E-03	1734	8.5E+00	4.8E-03	1734	8.3E+00
Zinc	***1.0E-02***	2059	***2.1E+01***	8.7E-03	2059	1.8E+01	5.5E-03	2059	1.1E+01

NOTES:

Surface water values presented here are based on Plots 1-6 A-Line samples analyzed for total metals only. The mink modeling used only these samples as these were closest to the rivers edge and theoretically the only ones available to the mink from shore.

BCF = Bioconcentration factor from surface water to fish (USEPA, 1999). If a bioconcentration factor for a metal was not available, the average of the available metal bioconcentration factors was used.

Bolded/Italicized values indicate a concentration based on non-detected values.

Table III-B13
Calculations for Risk Assessment Modeling
River Whole-Body Fish Tissue (Metals Calculations)
2007 Mink Modeling
Sauget, IL

Metal (mg/kg)	Adjacent		
	Surface Water Value	BCF	Adjusted Fish Concentration
Aluminum	***1.0E-01***	2.7	***2.7E-01***
Antimony	***1.0E-02***	40	***4.0E-01***
Arsenic	***5.0E-03***	114	***5.7E-01***
Barium	6.6E-02	633	4.1E+01
Beryllium	***2.0E-03***	62	***1.2E-01***
Cadmium	***2.5E-03***	907	***2.3E+00***
Chromium	***5.0E-03***	19	***9.5E-02***
Cobalt	***5.0E-03***	1734	***8.7E+00***
Copper	***1.8E-03***	710	***1.3E+00***
Lead	***2.5E-03***	0.090	***2.3E-04***
Manganese	***5.0E-03***	1734	***8.7E+00***
Mercury	***1.0E-04***	11168	***1.1E+00***
Nickel	***2.0E-02***	78	***1.6E+00***
Selenium	***5.0E-03***	129	***6.5E-01***
Silver	***5.0E-03***	88	***4.4E-01***
Thallium	***1.3E-02***	10000	***1.3E+02***
Vanadium	2.2E-03	1734	3.7E+00
Zinc	***3.1E-03***	2059	***6.3E+00***

NOTES:
Surface water values presented here are based on SW-SA2-GMCS near shore samples analyzed for dissolved metals only. The mink modeling used only these samples as these were closest to the rivers edge and theoretically the only ones available to the mink from shore.
BCF = Bioconcentration factor from surface water to fish (USEPA, 1999). If a bioconcentration factor for a metal was not available, the average of the available metal bioconcentration factors was used.
Bolded/Italicized values indicate a concentration based on non-detected values.

Table III-B14
Calculations for Risk Assessment Modeling
Pond Whole-Body Fish Tissue
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Pond						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	1	0	495	495	Bluegill	495	NA
1,2-Dichlorobenzene	ug/kg	1	0	495	495	Bluegill	495	NA
1,3-Dichlorobenzene	ug/kg	1	0	495	495	Bluegill	495	NA
1,4-Dichlorobenzene	ug/kg	1	0	495	495	Bluegill	495	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	1	0	495	495	Bluegill	495	NA
2,4,5-Trichlorophenol	ug/kg	1	0	495	495	Bluegill	495	NA
2,4,6-Trichlorophenol	ug/kg	1	0	495	495	Bluegill	495	NA
2,4-Dichlorophenol	ug/kg	1	0	495	495	Bluegill	495	NA
2,4-Dinitrophenol	ug/kg	1	0	2550	2550	Bluegill	2550	NA
2,4-Dinitrotoluene	ug/kg	1	0	495	495	Bluegill	495	NA
2,6-Dinitrotoluene	ug/kg	1	0	495	495	Bluegill	495	NA
2-Chloronaphthalene	ug/kg	1	0	495	495	Bluegill	495	NA
2-Chlorophenol	ug/kg	1	0	495	495	Bluegill	495	NA
2-Methylnaphthalene	ug/kg	1	0	495	495	Bluegill	495	NA
2-Methylphenol (o-Cresol)	ug/kg	1	0	495	495	Bluegill	495	NA
2-Nitroaniline	ug/kg	1	0	2550	2550	Bluegill	2550	NA
2-Nitrophenol	ug/kg	1	0	495	495	Bluegill	495	NA
3,3'-Dichlorobenzidine	ug/kg	1	0	1000	1000	Bluegill	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	1	0	495	495	Bluegill	495	NA
3-Nitroaniline	ug/kg	1	0	2550	2550	Bluegill	2550	NA
4,6-Dinitro-2-methylphenol	ug/kg	1	0	2550	2550	Bluegill	2550	NA
4-Bromophenyl Phenyl Ether	ug/kg	1	0	495	495	Bluegill	495	NA
4-Chloro-3-methylphenol	ug/kg	1	0	495	495	Bluegill	495	NA
4-Chloroaniline	ug/kg	1	0	1000	1000	Bluegill	1000	NA
4-Chlorophenyl Phenyl Ether	ug/kg	1	0	495	495	Bluegill	495	NA
4-Nitroaniline	ug/kg	1	0	2550	2550	Bluegill	2550	NA
4-Nitrophenol	ug/kg	1	0	2550	2550	Bluegill	2550	NA
Acenaphthene	ug/kg	1	0	495	495	Bluegill	495	NA
Acenaphthylene	ug/kg	1	0	495	495	Bluegill	495	NA
Anthracene	ug/kg	1	0	495	495	Bluegill	495	NA
Benzo(a)anthracene	ug/kg	1	0	495	495	Bluegill	495	NA
Benzo(a)pyrene	ug/kg	1	0	495	495	Bluegill	495	NA
Benzo(b)fluoranthene	ug/kg	1	0	495	495	Bluegill	495	NA
Benzo(g,h,i)perylene	ug/kg	1	0	495	495	Bluegill	495	NA
Benzo(k)fluoranthene	ug/kg	1	0	495	495	Bluegill	495	NA
bis(2-Chloroethoxy)methane	ug/kg	1	0	495	495	Bluegill	495	NA
bis(2-Chloroethyl)ether	ug/kg	1	0	495	495	Bluegill	495	NA
bis(2-Ethylhexyl)phthalate	ug/kg	1	0	495	495	Bluegill	495	NA
Butyl Benzyl Phthalate	ug/kg	1	0	495	495	Bluegill	495	NA
Carbazole	ug/kg	1	0	495	495	Bluegill	495	NA
Chrysene	ug/kg	1	0	495	495	Bluegill	495	NA
Dibenzo(a,h)anthracene	ug/kg	1	0	495	495	Bluegill	495	NA
Dibenzofuran	ug/kg	1	0	495	495	Bluegill	495	NA
Diethyl Phthalate	ug/kg	1	0	495	495	Bluegill	495	NA
Dimethyl Phthalate	ug/kg	1	0	495	495	Bluegill	495	NA
Di-n-butylphthalate	ug/kg	1	0	495	495	Bluegill	495	NA
Di-n-octylphthalate	ug/kg	1	0	495	495	Bluegill	495	NA
Fluoranthene	ug/kg	1	0	495	495	Bluegill	495	NA
Fluorene	ug/kg	1	0	495	495	Bluegill	495	NA
Hexachlorobenzene	ug/kg	1	0	495	495	Bluegill	495	NA
Hexachlorobutadiene	ug/kg	1	0	495	495	Bluegill	495	NA
Hexachlorocyclopentadiene	ug/kg	1	0	495	495	Bluegill	495	NA
Hexachloroethane	ug/kg	1	0	495	495	Bluegill	495	NA
Indeno(1,2,3-cd)pyrene	ug/kg	1	0	495	495	Bluegill	495	NA
Isophorone	ug/kg	1	0	495	495	Bluegill	495	NA
Naphthalene	ug/kg	1	0	495	495	Bluegill	495	NA
Nitrobenzene	ug/kg	1	0	495	495	Bluegill	495	NA
N-Nitroso-di-n-propylamine	ug/kg	1	0	495	495	Bluegill	495	NA
N-Nitrosodiphenylamine	ug/kg	1	0	495	495	Bluegill	495	NA
Pentachlorophenol	ug/kg	1	0	25.5	26	Bluegill	26	NA
Phenanthrene	ug/kg	1	0	495	495	Bluegill	495	NA
Phenol	ug/kg	1	0	495	495	Bluegill	495	NA
Pyrene	ug/kg	1	0	495	495	Bluegill	495	NA

Table III-B14
Calculations for Risk Assessment Modeling
Pond Whole-Body Fish Tissue
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Pond						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	1	0	5.0	5.0	Bluegill	5.0	NA
4,4'-DDE	ug/kg	1	0	5.0	5.0	Bluegill	5.0	NA
4,4'-DDT	ug/kg	1	0	20	20	Bluegill	20	NA
Aldrin	ug/kg	1	0	2.6	2.6	Bluegill	2.6	NA
alpha-BHC	ug/kg	1	0	2.6	2.6	Bluegill	2.6	NA
alpha-Chlordane	ug/kg	1	0	2.6	2.6	Bluegill	2.6	NA
beta-BHC	ug/kg	1	0	2.6	2.6	Bluegill	2.6	NA
delta-BHC	ug/kg	1	1	24	24	Bluegill	24	NA
Dieldrin	ug/kg	1	1	140	140	Bluegill	140	NA
Endosulfan I	ug/kg	1	0	2.6	2.6	Bluegill	2.6	NA
Endosulfan II	ug/kg	1	0	5.0	5.0	Bluegill	5.0	NA
Endosulfan Sulfate	ug/kg	1	0	5.0	5.0	Bluegill	5.0	NA
Endrin	ug/kg	1	0	5.0	5.0	Bluegill	5.0	NA
Endrin Aldehyde	ug/kg	1	0	5.0	5.0	Bluegill	5.0	NA
Endrin Ketone	ug/kg	1	1	3.6	3.6	Bluegill	3.6	NA
gamma-BHC (Lindane)	ug/kg	1	0	2.6	2.6	Bluegill	2.6	NA
gamma-Chlordane	ug/kg	1	0	2.6	2.6	Bluegill	2.6	NA
Heptachlor	ug/kg	1	0	2.6	2.6	Bluegill	2.6	NA
Heptachlor Epoxide	ug/kg	1	0	2.6	2.6	Bluegill	2.6	NA
Methoxychlor	ug/kg	1	0	26	26	Bluegill	26	NA
Toxaphene	ug/kg	1	0	255	255	Bluegill	255	NA
Herbicides								
2,4-D	ug/kg	1	0	13	13	Bluegill	13	NA
2,4-DB	ug/kg	1	0	13	13	Bluegill	13	NA
2,4,5-T	ug/kg	1	0	13	13	Bluegill	13	NA
2,4,5-TP (Silvex)	ug/kg	1	0	13	13	Bluegill	13	NA
Dalapon	ug/kg	1	0	3000	3000	Bluegill	3000	NA
Dicamba	ug/kg	1	0	30	30	Bluegill	30	NA
Dichlorprop	ug/kg	1	0	150	150	Bluegill	150	NA
Dinoseb	ug/kg	1	0	495	495	Bluegill	495	NA
MCPA	ug/kg	1	0	3000	3000	Bluegill	3000	NA
MCPP	ug/kg	1	0	3000	3000	Bluegill	3000	NA
PCBs								
Total PCBs	ug/kg	1	1	8445	8445	Bluegill	8445	NA
Dioxins/Furans								
TEQ	pg/g	1	1	9.9	9.9	Bluegill	9.9	NA
Metals								
Aluminum	mg/kg	1	1	16	16	Bluegill	16	NA
Antimony	mg/kg	1	0	0.90	0.90	Bluegill	0.90	NA
Arsenic	mg/kg	1	1	0.73	0.73	Bluegill	0.73	NA
Barium	mg/kg	1	1	5.3	5.3	Bluegill	5.3	NA
Beryllium	mg/kg	1	0	0.18	0.18	Bluegill	0.18	NA
Cadmium	mg/kg	1	0	0.23	0.23	Bluegill	0.23	NA
Calcium	mg/kg	1	1	12000	12000	Bluegill	12000	NA
Chromium	mg/kg	1	1	0.33	0.33	Bluegill	0.33	NA
Cobalt	mg/kg	1	0	0.46	0.46	Bluegill	0.46	NA
Copper	mg/kg	1	1	0.91	0.91	Bluegill	0.91	NA
Iron	mg/kg	1	1	57	57	Bluegill	57	NA
Lead	mg/kg	1	0	0.23	0.23	Bluegill	0.23	NA
Magnesium	mg/kg	1	1	430	430	Bluegill	430	NA
Manganese	mg/kg	1	1	9.9	9.9	Bluegill	9.9	NA
Mercury	mg/kg	1	1	0.062	0.062	Bluegill	0.062	NA
Nickel	mg/kg	1	0	1.8	1.8	Bluegill	1.8	NA
Potassium	mg/kg	1	1	2800	2800	Bluegill	2800	NA
Selenium	mg/kg	1	0	0.46	0.46	Bluegill	0.46	NA
Silver	mg/kg	1	0	0.46	0.46	Bluegill	0.46	NA
Sodium	mg/kg	1	1	920	920	Bluegill	920	NA
Thallium	mg/kg	1	0	0.46	0.46	Bluegill	0.46	NA
Vanadium	mg/kg	1	0	0.46	0.46	Bluegill	0.46	NA
Zinc	mg/kg	1	1	46	46	Bluegill	46	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.

Table III-B15
Calculations for Risk Assessment Modeling
Upstream River Whole-Body Fish Tissue (Osprey Modeling)
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Upstream Mississippi River						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	3	0	255	255	All	255	NA
1,2-Dichlorobenzene	ug/kg	3	0	255	255	All	255	NA
1,3-Dichlorobenzene	ug/kg	3	0	255	255	All	255	NA
1,4-Dichlorobenzene	ug/kg	3	0	255	255	All	255	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	3	0	255	255	All	255	NA
2,4,5-Trichlorophenol	ug/kg	3	0	255	255	All	255	NA
2,4,6-Trichlorophenol	ug/kg	3	0	255	255	All	255	NA
2,4-Dichlorophenol	ug/kg	3	0	255	255	All	255	NA
2,4-Dimethylphenol	ug/kg	3	0	255	255	All	255	NA
2,4-Dinitrophenol	ug/kg	3	0	1250	1250	All	1250	NA
2,4-Dinitrotoluene	ug/kg	3	0	255	255	All	255	NA
2,6-Dinitrotoluene	ug/kg	3	0	255	255	All	255	NA
2-Chloronaphthalene	ug/kg	3	0	255	255	All	255	NA
2-Chlorophenol	ug/kg	3	0	255	255	All	255	NA
2-Methylnaphthalene	ug/kg	3	0	255	255	All	255	NA
2-Methylphenol (o-Cresol)	ug/kg	3	1	110	255	All (except 15)	207	NA
2-Nitroaniline	ug/kg	3	0	1250	1250	All	1250	NA
2-Nitrophenol	ug/kg	3	0	255	255	All	255	NA
3,3'-Dichlorobenzidine	ug/kg	3	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	3	0	255	255	All	255	NA
3-Nitroaniline	ug/kg	3	0	1250	1250	All	1250	NA
4,6-Dinitro-2-methylphenol	ug/kg	3	0	1250	1250	All	1250	NA
4-Bromophenyl Phenyl Ether	ug/kg	3	0	255	255	All	255	NA
4-Chloro-3-methylphenol	ug/kg	3	0	255	255	All	255	NA
4-Chloroaniline	ug/kg	3	0	495	495	All	495	NA
4-Chlorophenyl Phenyl Ether	ug/kg	3	0	255	255	All	255	NA
4-Nitroaniline	ug/kg	3	0	1250	1250	All	1250	NA
4-Nitrophenol	ug/kg	3	0	1250	1250	All	1250	NA
Acenaphthene	ug/kg	3	0	255	255	All	255	NA
Acenaphthylene	ug/kg	3	0	255	255	All	255	NA
Anthracene	ug/kg	3	0	255	255	All	255	NA
Benzo(a)anthracene	ug/kg	3	0	255	255	All	255	NA
Benzo(a)pyrene	ug/kg	3	0	255	255	All	255	NA
Benzo(b)fluoranthene	ug/kg	3	0	255	255	All	255	NA
Benzo(g,h,i)perylene	ug/kg	3	0	255	255	All	255	NA
Benzo(k)fluoranthene	ug/kg	3	0	255	255	All	255	NA
bis(2-Chloroethoxy)methane	ug/kg	3	0	255	255	All	255	NA
bis(2-Chloroethyl)ether	ug/kg	3	0	255	255	All	255	NA
bis(2-Ethylhexyl)phthalate	ug/kg	3	0	255	255	All	255	NA
Butyl Benzyl Phthalate	ug/kg	3	0	255	255	All	255	NA
Carbazole	ug/kg	3	0	255	255	All	255	NA
Chrysene	ug/kg	3	0	255	255	All	255	NA
Dibenzo(a,h)anthracene	ug/kg	3	0	255	255	All	255	NA
Dibenzofuran	ug/kg	3	0	255	255	All	255	NA
Diethyl Phthalate	ug/kg	3	1	110	255	All (except 14)	207	NA
Dimethyl Phthalate	ug/kg	3	0	255	255	All	255	NA
Di-n-butylphthalate	ug/kg	3	0	255	255	All	255	NA
Di-n-octylphthalate	ug/kg	3	0	255	255	All	255	NA
Fluoranthene	ug/kg	3	0	255	255	All	255	NA
Fluorene	ug/kg	3	0	255	255	All	255	NA
Hexachlorobenzene	ug/kg	3	0	255	255	All	255	NA
Hexachlorobutadiene	ug/kg	3	0	255	255	All	255	NA
Hexachlorocyclopentadiene	ug/kg	3	0	255	255	All	255	NA
Hexachloroethane	ug/kg	3	0	255	255	All	255	NA
Indeno(1,2,3-cd)pyrene	ug/kg	3	0	255	255	All	255	NA
Isophorone	ug/kg	3	0	255	255	All	255	NA
Naphthalene	ug/kg	3	0	255	255	All	255	NA
Nitrobenzene	ug/kg	3	0	255	255	All	255	NA
N-Nitroso-di-n-propylamine	ug/kg	3	0	255	255	All	255	NA
N-Nitrosodiphenylamine	ug/kg	3	0	255	255	All	255	NA
Pentachlorophenol	ug/kg	3	0	1250	1250	All	1250	NA
Phenanthrene	ug/kg	3	0	255	255	All	255	NA
Phenol	ug/kg	3	0	255	255	All	255	NA
Pyrene	ug/kg	3	0	255	255	All	255	NA

Table III-B15
Calculations for Risk Assessment Modeling
Upstream River Whole-Body Fish Tissue (Osprey Modeling)
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Upstream Mississippi River						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	3	0	13	25	13	17	NA
4,4'-DDE	ug/kg	3	2	13	25	13	21	NA
4,4'-DDT	ug/kg	3	1	7.6	25	13	15	NA
Aldrin	ug/kg	3	0	13	25	13	17	NA
alpha-BHC	ug/kg	3	0	13	25	13	17	NA
alpha-Chlordane	ug/kg	3	0	13	25	13	17	NA
beta-BHC	ug/kg	3	0	13	25	13	17	NA
delta-BHC	ug/kg	3	0	13	25	13	17	NA
Dieldrin	ug/kg	3	2	6.7	32	14	21	NA
Endosulfan I	ug/kg	3	1	3.0	25	13	14	NA
Endosulfan II	ug/kg	3	0	13	25	13	17	NA
Endosulfan Sulfate	ug/kg	3	0	13	25	13	17	NA
Endrin	ug/kg	3	0	13	25	13	17	NA
Endrin Aldehyde	ug/kg	3	2	5.1	25	13	13	NA
Endrin Ketone	ug/kg	3	0	13	25	13	17	NA
gamma-BHC (Lindane)	ug/kg	3	0	13	25	13	17	NA
gamma-Chlordane	ug/kg	3	1	5.8	25	13	14	NA
Heptachlor	ug/kg	3	0	13	25	13	17	NA
Heptachlor Epoxide	ug/kg	3	0	13	25	13	17	NA
Methoxychlor	ug/kg	3	0	50	100	13	67	NA
Toxaphene	ug/kg	3	0	425	850	13	567	NA
Herbicides								
2,4-D	ug/kg	3	0	4.2	4.2	All	4.2	NA
2,4-DB	ug/kg	3	0	4.2	4.2	All	4.2	NA
2,4,5-T	ug/kg	3	1	4.2	7.1	14	5.1	NA
2,4,5-TP (Silvex)	ug/kg	3	1	4.2	7.5	14	5.3	NA
Dalapon	ug/kg	3	0	1000	1000	All	1000	NA
Dicamba	ug/kg	3	2	5.2	10	15	7.2	NA
Dichlorprop	ug/kg	3	0	50	50	All	50	NA
Dinoseb	ug/kg	3	0	50	50	All	50	NA
MCPA	ug/kg	3	0	1000	1000	All	1000	NA
MCPP	ug/kg	3	0	1000	1000	All	1000	NA
PCBs								
Total PCBs	ug/kg	3	0	25	25	All	25	NA
Dioxins/Furans								
TEQ	pg/g	3	3	1.3	5.2	15	2.9	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.
Calculations for river fish metals concentrations are presented in Table III-B13

Upstream Sample IDs:
13 = UDA Channel Catfish-Comp#1
14 = UDA Drum Comp
15 = UDA-UE Comp Shad

Table III-B15
Calculations for Risk Assessment Modeling
Adjacent River Whole-Body Fish Tissue (Osprey Modeling)
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Adjacent Mississippi River						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	9	0	255	255	All	255	NA
1,2-Dichlorobenzene	ug/kg	9	4	140	255	Various	228	NA
1,3-Dichlorobenzene	ug/kg	9	0	255	255	All	255	NA
1,4-Dichlorobenzene	ug/kg	9	1	130	255	All (except 9)	241	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	9	0	255	255	All	255	NA
2,4,5-Trichlorophenol	ug/kg	9	0	255	255	All	255	NA
2,4,6-Trichlorophenol	ug/kg	9	0	255	255	All	255	NA
2,4-Dichlorophenol	ug/kg	9	3	140	255	Various	227	NA
2,4-Dimethylphenol	ug/kg	9	0	255	255	All	255	NA
2,4-Dinitrophenol	ug/kg	9	0	1250	1250	All	1250	NA
2,4-Dinitrotoluene	ug/kg	9	0	255	255	All	255	NA
2,6-Dinitrotoluene	ug/kg	9	0	255	255	All	255	NA
2-Chloronaphthalene	ug/kg	9	0	255	255	All	255	NA
2-Chlorophenol	ug/kg	9	0	255	255	All	255	NA
2-Methylnaphthalene	ug/kg	9	0	255	255	All	255	NA
2-Methylphenol (o-Cresol)	ug/kg	9	4	140	255	Various	222	NA
2-Nitroaniline	ug/kg	9	0	1250	1250	All	1250	NA
2-Nitrophenol	ug/kg	9	0	255	255	All	255	NA
3,3'-Dichlorobenzidine	ug/kg	9	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	9	0	255	255	All	255	NA
3-Nitroaniline	ug/kg	9	0	1250	1250	All	1250	NA
4,6-Dinitro-2-methylphenol	ug/kg	9	0	1250	1250	All	1250	NA
4-Bromophenyl Phenyl Ether	ug/kg	9	0	255	255	All	255	NA
4-Chloro-3-methylphenol	ug/kg	9	0	255	255	All	255	NA
4-Chloroaniline	ug/kg	9	0	495	495	All	495	NA
4-Chlorophenyl Phenyl Ether	ug/kg	9	0	255	255	All	255	NA
4-Nitroaniline	ug/kg	9	0	1250	1250	All	1250	NA
4-Nitrophenol	ug/kg	9	0	1250	1250	All	1250	NA
Acenaphthene	ug/kg	9	0	255	255	All	255	NA
Acenaphthylene	ug/kg	9	0	255	255	All	255	NA
Anthracene	ug/kg	9	0	255	255	All	255	NA
Benzo(a)anthracene	ug/kg	9	0	255	255	All	255	NA
Benzo(a)pyrene	ug/kg	9	0	255	255	All	255	NA
Benzo(b)fluoranthene	ug/kg	9	0	255	255	All	255	NA
Benzo(g,h,i)perylene	ug/kg	9	0	255	255	All	255	NA
Benzo(k)fluoranthene	ug/kg	9	0	255	255	All	255	NA
bis(2-Chloroethoxy)methane	ug/kg	9	0	255	255	All	255	NA
bis(2-Chloroethyl)ether	ug/kg	9	0	255	255	All	255	NA
bis(2-Ethylhexyl)phthalate	ug/kg	9	0	255	255	All	255	NA
Butyl Benzyl Phthalate	ug/kg	9	0	255	255	All	255	NA
Carbazole	ug/kg	9	0	255	255	All	255	NA
Chrysene	ug/kg	9	0	255	255	All	255	NA
Dibenzo(a,h)anthracene	ug/kg	9	0	255	255	All	255	NA
Dibenzofuran	ug/kg	9	0	255	255	All	255	NA
Diethyl Phthalate	ug/kg	9	0	255	255	All	255	NA
Dimethyl Phthalate	ug/kg	9	0	255	255	All	255	NA
Di-n-butylphthalate	ug/kg	9	0	255	255	All	255	NA
Di-n-octylphthalate	ug/kg	9	0	255	255	All	255	NA
Fluoranthene	ug/kg	9	0	255	255	All	255	NA
Fluorene	ug/kg	9	0	255	255	All	255	NA
Hexachlorobenzene	ug/kg	9	0	255	255	All	255	NA
Hexachlorobutadiene	ug/kg	9	0	255	255	All	255	NA
Hexachlorocyclopentadiene	ug/kg	9	0	255	255	All	255	NA
Hexachloroethane	ug/kg	9	0	255	255	All	255	NA
Indeno(1,2,3-cd)pyrene	ug/kg	9	0	255	255	All	255	NA
Isophorone	ug/kg	9	0	255	255	All	255	NA
Naphthalene	ug/kg	9	0	255	255	All	255	NA
Nitrobenzene	ug/kg	9	0	255	255	All	255	NA
N-Nitroso-di-n-propylamine	ug/kg	9	0	255	255	All	255	NA
N-Nitrosodiphenylamine	ug/kg	9	0	255	255	All	255	NA
Pentachlorophenol	ug/kg	9	0	1250	1250	All	1250	NA
Phenanthrene	ug/kg	9	0	255	255	All	255	NA
Phenol	ug/kg	9	0	255	255	All	255	NA
Pyrene	ug/kg	9	0	255	255	All	255	NA

Table III-B15
Calculations for Risk Assessment Modeling
Adjacent River Whole-Body Fish Tissue (Osprey Modeling)
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Adjacent Mississippi River						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	9	2	6.6	13	Various	11	NA
4,4'-DDE	ug/kg	9	8	5.4	60	12	18	NA
4,4'-DDT	ug/kg	9	1	13	13	12	13	NA
Aldrin	ug/kg	9	0	13	13	All	13	NA
alpha-BHC	ug/kg	9	1	2.6	13	All (except 7)	11	NA
alpha-Chlordane	ug/kg	9	2	3.8	14	12	12	NA
beta-BHC	ug/kg	9	0	13	13	All	13	NA
delta-BHC	ug/kg	9	0	13	13	All	13	NA
Dieldrin	ug/kg	9	7	4.3	64	12	15	NA
Endosulfan I	ug/kg	9	1	4.3	13	All (except 12)	12	NA
Endosulfan II	ug/kg	9	0	13	13	All	13	NA
Endosulfan Sulfate	ug/kg	9	0	13	13	All	13	NA
Endrin	ug/kg	9	2	7.5	15	5	12	NA
Endrin Aldehyde	ug/kg	9	2	6.4	13	Various	12	NA
Endrin Ketone	ug/kg	9	0	13	13	All	13	NA
gamma-BHC (Lindane)	ug/kg	9	0	13	13	All	13	NA
gamma-Chlordane	ug/kg	9	2	3.4	13	Various	11	NA
Heptachlor	ug/kg	9	0	13	13	All	13	NA
Heptachlor Epoxide	ug/kg	9	2	3.4	13	Various	11	NA
Methoxychlor	ug/kg	9	0	50	50	All	50	NA
Toxaphene	ug/kg	9	0	425	425	All	425	NA
Herbicides								
2,4-D	ug/kg	9	0	4.2	4.2	All	4.2	NA
2,4-DB	ug/kg	9	0	4.2	4.2	All	4.2	NA
2,4,5-T	ug/kg	9	3	4.2	13	10	5.7	NA
2,4,5-TP (Silvex)	ug/kg	9	5	3.3	8.7	8	4.9	NA
Dalapon	ug/kg	9	0	1000	1000	All	1000	NA
Dicamba	ug/kg	9	0	10	10	All	10	NA
Dichlorprop	ug/kg	9	0	50	50	All	50	NA
Dinoseb	ug/kg	9	0	50	50	All	50	NA
MCPA	ug/kg	9	0	1000	1000	All	1000	NA
MCPP	ug/kg	9	3	1000	8600	5	2300	NA
PCBs								
Total PCBs	ug/kg	9	0	25	25	All	25	NA
Dioxins/Furans								
TEQ	pg/g	9	9	0.42	7.6	8	2.8	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.
Calculations for river fish metals concentrations are presented in Table III-B13

Adjacent Sample IDs:
5 = PDA Channel Catfish-Comp#2
7 = PDA Comp#1 Shad
8 = PDA Comp#2 Shad
9 = PDA Comp#3 Shad
10 = PDA Drum Comp#1
12 = PDA Drum-Comp#4

Table III-B15
Calculations for Risk Assessment Modeling
Downstream River Whole-Body Fish Tissue (Osprey Modeling)
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Downstream Mississippi River						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
SVOCs								
1,2,4-Trichlorobenzene	ug/kg	3	0	255	255	All	255	NA
1,2-Dichlorobenzene	ug/kg	3	0	255	255	All	255	NA
1,3-Dichlorobenzene	ug/kg	3	0	255	255	All	255	NA
1,4-Dichlorobenzene	ug/kg	3	0	255	255	All	255	NA
2,2'-Oxybis(1-Chloropropane)	ug/kg	3	0	255	255	All	255	NA
2,4,5-Trichlorophenol	ug/kg	3	0	255	255	All	255	NA
2,4,6-Trichlorophenol	ug/kg	3	0	255	255	All	255	NA
2,4-Dichlorophenol	ug/kg	3	0	255	255	All	255	NA
2,4-Dimethylphenol	ug/kg	3	0	255	255	All	255	NA
2,4-Dinitrophenol	ug/kg	3	0	1250	1250	All	1250	NA
2,4-Dinitrotoluene	ug/kg	3	0	255	255	All	255	NA
2,6-Dinitrotoluene	ug/kg	3	0	255	255	All	255	NA
2-Chloronaphthalene	ug/kg	3	0	255	255	All	255	NA
2-Chlorophenol	ug/kg	3	0	255	255	All	255	NA
2-Methylnaphthalene	ug/kg	3	0	255	255	All	255	NA
2-Methylphenol (o-Cresol)	ug/kg	3	3	290	340	1	317	NA
2-Nitroaniline	ug/kg	3	0	1250	1250	All	1250	NA
2-Nitrophenol	ug/kg	3	0	255	255	All	255	NA
3,3'-Dichlorobenzidine	ug/kg	3	0	1000	1000	All	1000	NA
3/4-Methylphenol (m&p-Cresol)	ug/kg	3	0	255	255	All	255	NA
3-Nitroaniline	ug/kg	3	0	1250	1250	All	1250	NA
4,6-Dinitro-2-methylphenol	ug/kg	3	0	1250	1250	All	1250	NA
4-Bromophenyl Phenyl Ether	ug/kg	3	0	255	255	All	255	NA
4-Chloro-3-methylphenol	ug/kg	3	0	255	255	All	255	NA
4-Chloroaniline	ug/kg	3	0	495	495	All	495	NA
4-Chlorophenyl Phenyl Ether	ug/kg	3	0	255	255	All	255	NA
4-Nitroaniline	ug/kg	3	0	1250	1250	All	1250	NA
4-Nitrophenol	ug/kg	3	0	1250	1250	All	1250	NA
Acenaphthene	ug/kg	3	0	255	255	All	255	NA
Acenaphthylene	ug/kg	3	0	255	255	All	255	NA
Anthracene	ug/kg	3	0	255	255	All	255	NA
Benzo(a)anthracene	ug/kg	3	0	255	255	All	255	NA
Benzo(a)pyrene	ug/kg	3	0	255	255	All	255	NA
Benzo(b)fluoranthene	ug/kg	3	0	255	255	All	255	NA
Benzo(g,h,i)perylene	ug/kg	3	0	255	255	All	255	NA
Benzo(k)fluoranthene	ug/kg	3	0	255	255	All	255	NA
bis(2-Chloroethoxy)methane	ug/kg	3	0	255	255	All	255	NA
bis(2-Chloroethyl)ether	ug/kg	3	0	255	255	All	255	NA
bis(2-Ethylhexyl)phthalate	ug/kg	3	0	255	255	All	255	NA
Butyl Benzyl Phthalate	ug/kg	3	0	255	255	All	255	NA
Carbazole	ug/kg	3	0	255	255	All	255	NA
Chrysene	ug/kg	3	0	255	255	All	255	NA
Dibenzo(a,h)anthracene	ug/kg	3	0	255	255	All	255	NA
Dibenzofuran	ug/kg	3	0	255	255	All	255	NA
Diethyl Phthalate	ug/kg	3	0	255	255	All	255	NA
Dimethyl Phthalate	ug/kg	3	0	255	255	All	255	NA
Di-n-butylphthalate	ug/kg	3	0	255	255	All	255	NA
Di-n-octylphthalate	ug/kg	3	0	255	255	All	255	NA
Fluoranthene	ug/kg	3	0	255	255	All	255	NA
Fluorene	ug/kg	3	0	255	255	All	255	NA
Hexachlorobenzene	ug/kg	3	0	255	255	All	255	NA
Hexachlorobutadiene	ug/kg	3	0	255	255	All	255	NA
Hexachlorocyclopentadiene	ug/kg	3	0	255	255	All	255	NA
Hexachloroethane	ug/kg	3	0	255	255	All	255	NA
Indeno(1,2,3-cd)pyrene	ug/kg	3	0	255	255	All	255	NA
Isophorone	ug/kg	3	0	255	255	All	255	NA
Naphthalene	ug/kg	3	0	255	255	All	255	NA
Nitrobenzene	ug/kg	3	0	255	255	All	255	NA
N-Nitroso-di-n-propylamine	ug/kg	3	0	255	255	All	255	NA
N-Nitrosodiphenylamine	ug/kg	3	0	255	255	All	255	NA
Pentachlorophenol	ug/kg	3	0	1250	1250	All	1250	NA
Phenanthrene	ug/kg	3	0	255	255	All	255	NA
Phenol	ug/kg	3	0	255	255	All	255	NA
Pyrene	ug/kg	3	0	255	255	All	255	NA

Table III-B15
Calculations for Risk Assessment Modeling
Downstream River Whole-Body Fish Tissue (Osprey Modeling)
Sauget, IL

Analyte	Units	Whole-Body Fish Tissue - Downstream Mississippi River						
		# of Samples	# of Detects	Minimum Value	Maximum Value	Maximum Sample ID	Mean Risk Assessment Concentration	95% UCL Risk Assessment Concentration
Pesticides								
4,4'-DDD	ug/kg	3	1	12	25	1	17	NA
4,4'-DDE	ug/kg	3	3	5.2	19	3	13	NA
4,4'-DDT	ug/kg	3	0	13	25	1	17	NA
Aldrin	ug/kg	3	0	13	25	1	17	NA
alpha-BHC	ug/kg	3	0	13	25	1	17	NA
alpha-Chlordane	ug/kg	3	1	7.7	12.5	All (except 1)	11	NA
beta-BHC	ug/kg	3	0	13	25	1	17	NA
delta-BHC	ug/kg	3	0	13	25	1	17	NA
Dieldrin	ug/kg	3	3	8.8	19	1	14	NA
Endosulfan I	ug/kg	3	0	13	25	1	17	NA
Endosulfan II	ug/kg	3	0	13	25	1	17	NA
Endosulfan Sulfate	ug/kg	3	1	12	25	1	17	NA
Endrin	ug/kg	3	0	13	25	1	17	NA
Endrin Aldehyde	ug/kg	3	1	4.9	25	1	14	NA
Endrin Ketone	ug/kg	3	0	13	25	1	17	NA
gamma-BHC (Lindane)	ug/kg	3	0	13	25	1	17	NA
gamma-Chlordane	ug/kg	3	1	3.5	25	1	14	NA
Heptachlor	ug/kg	3	0	13	25	1	17	NA
Heptachlor Epoxide	ug/kg	3	0	13	25	1	17	NA
Methoxychlor	ug/kg	3	0	50	100	1	67	NA
Toxaphene	ug/kg	3	0	425	850	1	567	NA
Herbicides								
2,4-D	ug/kg	3	0	4.2	4.2	All	4.2	NA
2,4-DB	ug/kg	3	0	4.2	4.2	All	4.2	NA
2,4,5-T	ug/kg	3	0	4.2	4.2	All	4.2	NA
2,4,5-TP (Silvex)	ug/kg	3	2	3.9	6.9	3	5.0	NA
Dalapon	ug/kg	3	0	1000	1000	All	1000	NA
Dicamba	ug/kg	3	0	10	10	All	10	NA
Dichlorprop	ug/kg	3	0	50	50	All	50	NA
Dinoseb	ug/kg	3	0	50	50	All	50	NA
MCPA	ug/kg	3	0	1000	1000	All	1000	NA
MCPP	ug/kg	3	0	1000	1000	All	1000	NA
PCBs								
Total PCBs	ug/kg	3	0	25	25	All	25	NA
Dioxins/Furans								
TEQ	pg/g	3	3	0.46	4.0	1	2.1	NA

NOTES:
NA = Not applicable
Shaded cells indicate either maximum concentrations based on an adjusted non-detected value (e.g., one-half of the detection limit), or a mean/95% UCL concentration based entirely on adjusted non-detected values.
Calculations for river fish metals concentrations are presented in Table III-B13

Downstream Sample IDs:
1 = DDA Channel Catfish-Comp#1
3 = DDA Drum-Comp#1

Table III-B16
Calculations for Risk Assessment Modeling
River Whole-Body Fish Tissue (Metals Calculations)
2002 Osprey Modeling
Sauget, IL

	Upstream			Adjacent			Downstream		
Metal (mg/kg)	Surface Water Value	BCF	Adjusted Fish Concentration	Surface Water Value	BCF	Adjusted Fish Concentration	Surface Water Value	BCF	Adjusted Fish Concentration
Aluminum	7.1E-01	2.7	1.9E+00	7.5E-01	2.7	2.0E+00	8.1E-01	2.7	2.2E+00
Antimony	***1.0E-02***	40	***4.0E-01***	***1.0E-02***	40	***4.0E-01***	9.3E-03	40	3.7E-01
Arsenic	***5.0E-03***	114	***5.7E-01***	4.9E-03	114	5.6E-01	4.5E-03	114	5.2E-01
Barium	5.9E-02	633	3.7E+01	6.1E-02	633	3.9E+01	6.1E-02	633	3.9E+01
Beryllium	***2.0E-03***	62	***1.2E-01***	***2.0E-03***	62	***1.2E-01***	***2.0E-03***	62	***1.2E-01***
Cadmium	***2.5E-03***	907	***2.3E+00***	***2.5E-03***	907	***2.3E+00***	***2.5E-03***	907	***2.3E+00***
Chromium	***5.0E-03***	19	***9.5E-02***	***5.0E-03***	19	***9.5E-02***	***5.0E-03***	19	***9.5E-02***
Cobalt	4.5E-03	1734	7.8E+00	4.4E-03	1734	7.6E+00	3.3E-03	1734	5.7E+00
Copper	***1.0E-02***	710	***7.1E+00***	1.1E-02	710	7.5E+00	8.9E-03	710	6.3E+00
Lead	***2.5E-03***	0.090	***2.3E-04***	2.6E-03	0.090	2.4E-04	***2.5E-03***	0.090	***2.3E-04***
Manganese	8.1E-02	1734	1.4E+02	8.6E-02	1734	1.5E+02	8.5E-02	1734	1.5E+02
Mercury	***1.0E-04***	11168	***1.1E+00***	1.0E-04	11168	1.2E+00	***1.0E-04***	11168	***1.1E+00***
Nickel	***2.0E-02***	78	***1.6E+00***	***2.0E-02***	78	***1.6E+00***	***2.0E-02***	78	***1.6E+00***
Selenium	***5.0E-03***	129	***6.5E-01***	***5.0E-03***	129	***6.5E-01***	***5.0E-03***	129	***6.5E-01***
Silver	***5.0E-03***	88	***4.4E-01***	4.9E-03	88	4.3E-01	***5.0E-03***	88	***4.4E-01***
Thallium	5.0E-03	10000	5.0E+01	***5.0E-03***	10000	***5.0E+01***	***5.0E-03***	10000	***5.0E+01***
Vanadium	4.8E-03	1734	8.3E+00	4.9E-03	1734	8.5E+00	4.9E-03	1734	8.5E+00
Zinc	9.3E-03	2059	1.9E+01	1.1E-02	2059	2.2E+01	5.3E-03	2059	1.1E+01

NOTES:

Surface water values presented here are based on all samples analyzed for total metals. The osprey modeling used all the sample locations for calculations because all areas of the river are accessible to the osprey.

BCF = Bioconcentration factor from surface water to fish (USEPA, 1999). If a bioconcentration factor for a metal was not available, the average of the available metal bioconcentration factors was used.

Bolded/Italicized values indicate a concentration based on non-detected values.

Table III-B17
Calculations for Risk Assessment Modeling
River Whole-Body Fish Tissue (Metals Calculations)
2007 Osprey Modeling
Sauget, IL

	Adjacent		
Metal (mg/kg)	Surface Water Value	BCF	Adjusted Fish Concentration
Aluminum	8.6E-02	2.7	2.3E-01
Antimony	***1.0E-02***	40	***4.0E-01***
Arsenic	***5.0E-03***	114	***5.7E-01***
Barium	6.5E-02	633	4.1E+01
Beryllium	***2.0E-03***	62	***1.2E-01***
Cadmium	***2.5E-03***	907	***2.3E+00***
Chromium	***5.0E-03***	19	***9.5E-02***
Cobalt	***5.0E-03***	1734	***8.7E+00***
Copper	***1.9E-03***	710	***1.3E+00***
Lead	***2.5E-03***	0.090	***2.3E-04***
Manganese	***5.0E-03***	1734	***8.7E+00***
Mercury	***1.0E-04***	11168	***1.1E+00***
Nickel	1.3E-02	78	1.0E+00
Selenium	***5.0E-03***	129	***6.5E-01***
Silver	***5.0E-03***	88	***4.4E-01***
Thallium	***1.3E-02***	10000	***1.3E+02***
Vanadium	2.3E-03	1734	4.0E+00
Zinc	***3.0E-03***	2059	***6.1E+00***

NOTES:
Surface water values presented here are based on all samples analyzed for dissolved metals. The osprey modeling used all the sample locations for calculations because all areas of the river are accessible to the osprey.
BCF = Bioconcentration factor from surface water to fish (USEPA, 1999). If a bioconcentration factor for a metal was not available, the average of the available metal bioconcentration factors was used.
Bolded/Italicized values indicate a concentration based on non-detected values.

Appendix III-C

Wildlife TRVs and TEFs

Table III-C1
Mammalian and Avian NOAELs
Sauget, IL

					Derived NOAEL								Derived NOAEL
Chemical	Mammalian Test Species	Test Species Chronic NOAEL (mg/kg-d)	Note	Uncertainty Factor (o)	Prairie Vole NOAEL (mg/kg-d)	Short Tailed Shrew NOAEL (mg/kg-d)	Mink NOAEL (mg/kg-d)	Fox NOAEL (mg/kg-d)	AvianTest Species	Test Species Chronic NOAEL (mg/kg-d)	Note	Uncertainty Factor (o)	Osprey NOAEL (mg/kg-d)
SVOCs													
1,2,4-Trichlorobenzene	Rat	14.8	b		17	18	14	13	Wild bird species	1.0	a,w,d,p	100	2.0
1,2-Dichlorobenzene	Rat	86	c		99	104	80	74	Wild bird species	0.42	a,f,d,p	100	0.83
1,3-Dichlorobenzene		86	e		99	104	80	74	Wild bird species	0.42	a,f,d,p	100	0.83
1,4-Dichlorobenzene		86	e		99	104	80	74	Wild bird species	0.42	a,f,d,p	100	0.83
2,2'-oxybis (1-chloropropane)	Mouse	36	b		36	37	29	27		1.1	m		1.5
2,4,5-Trichlorophenol	Rat	10	b		12	12	9.4	8.6			u		
2,4,6-Trichlorophenol	Rat	500	q		578	604	469	429			u		
2,4-Dichlorophenol	Rat	0.30	b		0.35	0.36	0.28	0.26		102	n		99
2,4-Dimethylphenol	Mouse	5.0	b		5.0	5.2	4.1	3.7		102	n		99
2,4-Dinitrophenol	Rabbit	0.0013	r,d,p	100	0.0016	0.0016	0.0013	0.0012	Chicken	102	r,d,p	100	99
2,4-Dinitrotoluene	Dog	0.20	b		0.29	0.30	0.23	0.21		102	n		99
2,6-Dinitrotoluene	Rat	0.70	q,p	10	0.81	0.85	0.66	0.60		102	n		99
2-Chloronaphthalene	Mouse	25	c,d	10	25	26	20	19		1.1	g		2.2
2-Chlorophenol	Rat	50	q		58	60	47	43	Blackbird	1.1	l,d,p	100	2.2
2-Methylnaphthalene	Mouse	2850	r,p	10	2843	2971	2309	2110		1.1	g		2.2
2-Methylphenol	Mink	219	b		270	282	219	200		0.96	v		1.9
2-Nitroaniline		4.2	s		4.9	5.1	3.9	3.6	Blackbird	7.5	l,d,p	100	7.5
2-Nitrophenol		2.5	t		2.9	3.0	2.3	2.1		0.65	t		0.87
3,3'-Dichlorobenzidine	Dog	10	q		15	16	12	11			u		
3/4-Methylphenol		219	h		270	282	219	200	Blackbird	0.96	l,d,p	100	1.9
3-Nitroaniline	Rat	4.2	r,d,p	100	4.9	5.1	3.9	3.6	Blackbird	1.3	l,d,p	100	2.6
4,6-Dinitro-2-Methylphenol	Rat	0.25	q,d	10	0.29	0.30	0.23	0.21	Pigeon	0.070	a,d,p	100	0.094
4-Bromophenyl-phenylether	Rat	1.0	c,x		1.2	1.2	0.94	0.86			u		
4-Chloro-3-methylphenol	Rat	112	r,d,p	100	129	135	105	96	Blackbird	1.13	l,d,p	100	2.2
4-Chloroaniline	Rat	1.3	b		1.4	1.5	1.2	1.1	Sparrow	1.0	l,d,p	100	174
4-Chlorophenyl-phenylether	Rat	1.0	c,x		1.2	1.2	0.94	0.86			u		
4-Nitroaniline	Rat	4.2	r,d,p	100	4.9	5.1	3.9	3.6	Blackbird	0.75	l,d,p	100	393
4-Nitrophenol	Rat	2.5	q,d	10	2.9	3.0	2.3	2.1	Pigeon	0.65	a,d,p	100	0.87
Acenaphthene	Mouse	18	c,d	10	17	18	14	13	Blackbird	1.0	l,d,p	100	2.0
Acenaphthylene		18	i		17	18	14	13		23	k		24
Anthracene	Mouse	100	b		100	104	81	74	Blackbird	1.1	l,d,p	100	2.2
Benzo(a)anthracene		1.0	j		1.0	1.0	0.81	0.74		7.1	j		7.1

NOTES:

(a) - NTP, 2003
(b) - SRSERD, 1999
(c) - USEPA, 2002
(d) - acute/subchronic study
(e) - based on 1,2-Dichlorobenzene
(f) - based on 1,3 Dinitrobenzene
(g) - based on Anthracene
(h) - based on 2-Methylphenol
(i) - based on Acenaphthene
(j) - based on Benzo(a)pyrene
(k) - based on Phenanthrene
(l) - Schafer *et al* ., 1983
(m) - based on Bis(2-ethylhexyl) phthalate
(n) - based on 2,4-Dinitrophenol
(o) - UF = 10 for subchronic/acute exposure to chronic OR from a LOAEL/LD50 to a NOAEL
(p) - based on a LOAEL/LD_{50}
(q) - ATSDR, 2002
(r) - NIOSH, 2002
(s) - based on 4-Nitroanaline
(t) - based on 4-Nitrophenol
(u) - No avian data available, therefore no TRV calculated
(v) - based on 3/4 Methylphenol
(w) - based on 2,4,5-Trichloronitrobenzene
(x) - based on Decabromodiphenyl ether

Table III-C1
Mammalian and Avian NOAELs
Sauget, IL

					Derived NOAEL								Derived NOAEL
Chemical	Mammalian Test Species	Test Species Chronic NOAEL (mg/kg-d)	Note	Uncertainty Factor (o)	Prairie Vole NOAEL (mg/kg-d)	Short Tailed Shrew NOAEL (mg/kg-d)	Mink NOAEL (mg/kg-d)	Fox NOAEL (mg/kg-d)	AvianTest Species	Test Species Chronic NOAEL (mg/kg-d)	Note	Uncertainty Factor (o)	Osprey NOAEL (mg/kg-d)
SVOCs													
Benzo(a)pyrene	Mouse	1.0	a		1.0	1.0	0.81	0.74	Chicken	7.1	z		7.1
Benzo(b)fluoranthene		1.0	j		1.0	1.0	0.81	0.74		7.1	j		7.1
Benzo(ghi)perylene		1.0	j		1.0	1.0	0.81	0.74		7.1	j		7.1
Benzo(k)fluoranthene		1.0	j		1.0	1.0	0.81	0.74		7.1	j		7.1
Bis(2-chloroethoxy)methane	Mouse	36	k		36	37	29	27		1.1	e		1.5
Bis(2-chloroethyl)ether	Mouse	36	k		36	37	29	27		1.1	e		1.5
Bis(2-ethylhexyl)phthalate	Mouse	18	b		19	13	118	262	Dove	1.1	b		1.5
Butylbenzylphthalate	Rat	16	c,d	10	18	19	15	14		1.1	e		1.5
Carbazole	Mouse	3.0	v,d,p	100	3.0	3.1	2.4	2.2	u				
Chrysene		1.0	j		1.0	1.0	0.81	0.74		7.1	j		7.1
Dibenzo(ah)anthracene		1.0	j		1.0	1.0	0.81	0.74		7.1	j		7.1
Dibenzofuran	Hamster	0.013	v,w,d,p	100	0.015	0.016	0.012	0.011	Blackbird	1.0	aa,d,p	100	1.3
Diethyl phthalate	Mouse	4580	b		4525	5576	1692	1104		1.0	f		1.3
Dimethyl phthalate		4580	l		4568	4774	3711	3391	Blackbird	1.0	aa,d,p	100	1.3
Di-n-butylphthalate	Mouse	550	b		558	433	1844	3098	Dove	0.11	b		0.15
Di-n-octylphthalate		550	m		549	573	446	407	Pheasant	8.8	bb,d,p	100	9.5
Fluoranthene	Mouse	13	c,d	10	12	13	10	9.3		7.1	j		7.1
Fluorene	Mouse	13	b		12	13	10	9.3	Blackbird	1.0	aa,d,p	100	1.3
Hexachlorobenzene	Rat	0.080	c		0.092	0.097	0.075	0.069	Quail	5.5	r,d	10	8.4
Hexachlorobutadiene	Rat	0.20	q		0.23	0.24	0.19	0.17	Quail	3.2	s		4.9
Hexachlorocyclopentadiene	Rat	0.60	c,d,n	10	0.69	0.72	0.56	0.51		3.2	g		4.9
Hexachloroethane	Rat	0.10	b		0.12	0.12	0.094	0.086		3.2	g		4.9
Indeno(1,2,3-cd)pyrene		1.0	j		1.0	1.0	0.81	0.74		7.1	j		7.1
Isophorone	Dog	15	c,d	10	22	22	17	16	u				
Naphthalene	Rat	7.1	c,d	10	8.2	8.6	6.7	6.1		23	y		24
Nitrobenzene	Mouse	0.046	c,d,p	100	0.046	0.048	0.037	0.034	Wild bird species	0.42	t,h,d,p	100	0.53
N-nitroso-di-n-propylamine	Mouse	0.010	q,d,p	100	0.010	0.010	0.0081	0.0074		7.5	x		9.4
N-nitrosodiphenylamine	Rat	200	q		231	242	188	172		7.5	x		9.4
Pentachlorophenol	Rat	0.24	b		0.37	0.43	0.20	0.15	Quail	8.7	r,d,p	100	13.4
Phenanthrene		18	i		17	18	14	13	Mallard	23	z		24
Phenol	Rat	60	b		69	72	56	51	Blackbird	1.1	aa,d,p	100	1.4
Pyrene	Mouse	7.5	c,d	10	7.5	7.8	6.1	5.6		7.1	j		7.1

NOTES:
(a) - Sample *et al* ., 1996
(b) - SRSERD, 1999
(c) - USEPA, 2002
(d) - acute/subchronic study
(e) - based on Bis(2-ethylhexyl) phthalate
(f) - based on Dimethyl phthalate
(g) - based on Hexachlorobutadiene
(h) - based on 1,3 Dinitrobenzene
(i) - based on Acenaphthene
(j) - based on Benzo(a)pyrene
(k) -based on 2,2'-Oxybis (1-chloropropane)
(l) - based on Diethyl phthalate
(m) - based on Di-n-butylphthalate
(n) - based on $BMDL_{10}$ - 95% lower confidence limit on the maximum likelihood estimate of dose equaling 10% risk
(o) - UF = 10 for subchronic/acute exposure to a chronic OR from a LOAEL/LD50 to a NOAEL
(p) - based on a $LOAEL/LD_{50}$
(q) - ATSDR, 2002
(r) - Hill and Camardes, 1986
(s) - Schwetz *et al* ., 1974
(t) - NTP, 2003
(u) - No avian data available, therefore no TRV calculated
(v) - SIRI, 2003
(w) - Based on hamster mutation data - calculated using average rat body weight and daily water intake from Sample *et al* ., 1996.
(x) - based on 2-Nitroanaline
(y) - based on Phenanthrene
(z) - Windward Environmental, 2001
(aa) - Schafer *et al* ., 1983
(bb) - Hill *et al* ., 1975

Table III-C1
Mammalian and Avian NOAELs
Sauget, IL

					Derived NOAEL								Derived NOAEL
Chemical	Mammalian Test Species	Test Species Chronic NOAEL (mg/kg-d)	Note	Uncertainty Factor (k)	Prairie Vole NOAEL (mg/kg-d)	Short Tailed Shrew NOAEL (mg/kg-d)	Mink NOAEL (mg/kg-d)	Fox NOAEL (mg/kg-d)	AvianTest Species	Test Species Chronic NOAEL (mg/kg-d)	Note	Uncertainty Factor (k)	Osprey NOAEL (mg/kg-d)
Pesticides													
4,4'-DDD		0.80	f		0.42	0.34	1.1	1.6		0.0028	f		0.0024
4,4'-DDE		0.80	f		0.42	0.34	1.1	1.6		0.0028	f		0.0024
4,4'-DDT (DDT and metabolites)	Rat	0.80	a		0.42	0.34	1.1	1.6	Pelican	0.0028	a		0.0024
Aldrin	Rat	0.20	a		0.28	0.31	0.17	0.14	Bobwhite	0.066	u,d,e	100	0.14
alpha-BHC	Rat/Mink	1.6/.014	a,g		2.3	2.5	0.014	0.011	Quail	0.56	a		0.0037
alpha-Chlordane	Mouse	4.6	a,h		4.6	5.2	2.5	2.0	Blackbird	2.14	a,h		246
beta-BHC	Rat	0.40	a		0.57	0.63	0.34	0.28	Quail	0.56	a		0.0037
delta-BHC	Rat/Mink	1.6/.014	a,g		2.3	2.5	0.014	0.011	Quail	0.56	a		0.0037
Dieldrin	Rat	0.020	a		0.018	0.017	0.021	0.023	Barn owl	0.077	a		0.098
Endosulfan-I	Rat	0.15	a,i		0.43	0.59	0.095	0.049	Partridge	10	a,i		13
Endosulfan-II	Rat	0.15	a,i		0.43	0.59	0.095	0.049	Partridge	10	a,i		13
Endosulfan sulfate	Rat	0.15	a,i		0.43	0.59	0.095	0.049	Partridge	10	a,i		13
Endrin	Mouse	0.092	a		0.092	0.094	0.082	0.078	Screech owl	0.010	a		0.017
Endrin Aldehyde		0.092	j		0.092	0.094	0.082	0.078		0.010	j		0.017
Endrin Ketone		0.092	j		0.092	0.094	0.082	0.078		0.010	j		0.017
gamma-BHC (Lindane)	Rat	8.0	a		20	27	5.3	3.0	Mallard	2.0	a		2.5
gamma-Chlordane	Mouse	4.6	a,h		4.6	5.2	2.5	2.0	Blackbird	2.14	a,h		246
Heptachlor	Mink	0.10	a		0.074	0.070	0.10	0.11	Quail	0.065	m		0.10
Heptachlor epoxide	Rat	0.0013	c,e	10	0.0010	0.00095	0.0014	0.0016		0.065	o		0.10
Methoxychlor	Rat	4.0	a		2.3	2.0	5.1	7.1	Chicken	145	q		140
Toxaphene	Rat	8.0	a		7.9	7.9	8.0	8.1	Black duck	2.0	b		2.0
Herbicides													
2,4-D (herbicide)	Rat	1.0	c		1.6	1.9	0.81	0.60	Quail	6.7	q,d,e	100	5.3
2,4-DB	Dog	0.80	c,d	10	2.6	3.1	1.3	0.98		6.7	r		5.3
2,4,5-T	Rat	3.0	c		3.5	3.6	2.8	2.6	Pheasant	5.0	u,d,e	100	7.7
2,4,5-TP (Silvex)	Dog	0.75	c		1.1	1.1	0.87	0.80		5.0	v		7.7
Dalapon	Rat	8.5	c		9.8	10	7.9	7.2	Quail	10	q,d,e	100	15
Dicamba	Rabbit	3.0	c		3.7	3.9	3.0	2.8	Quail	13	q,d,e	100	19
Dichloroprop	Mouse	0.20	l,d,e	100	0.20	0.21	0.16	0.15	n				
Dinoseb	Rat	0.10	c,e	10	0.12	0.12	0.094	0.086	Quail	0.070	q,d,e	100	0.11
MCPA	Dog	0.15	c		0.22	0.22	0.17	0.16	Quail	3.8	q,d,e	100	5.8
MCPP	Rat	0.30	c,d	10	0.35	0.36	0.28	0.26	Quail	7.0	q,d,e	100	11
PCBs													
Total PCBs	Rat	0.10	aa,d,e	100	0.12	0.12	0.094	0.086	Quail	5.0	aa,e	10	7.7
Dioxins/Furans													
2,3,7,8-TCDD	Rat	0.0000010	y		0.0000012	0.0000012	0.00000094	0.00000086	Ring-necked pheasant	0.0000014	z,d	10	0.0000015
Metals													
Aluminum	Mouse	1.9	a		1.9	2.0	1.6	1.4	Dove	110	a		147
Antimony	Mouse	0.13	a		0.12	0.13	0.10	0.093		1.0	w		1.1
Arsenic	Mouse	0.13	a		0.13	0.14	0.081	0.067	Mallard	5.1	a		6.9
Barium	Rat	5.1	a		9.4	11	3.9	2.7	1-Day old chick	21	b		35
Beryllium	Rat	0.66	a		0.76	0.80	0.62	0.57		1.5	x		1.5
Cadmium	Rat	1.0	a		3.9	5.8	0.56	0.24	Mallard	1.5	a		1.5
Chromium (6+)	Rat	3.3	a		3.8	4.0	3.1	2.8	Black Duck	1.0	a,t		1.1
Cobalt	Rat	0.050	b		0.058	0.060	0.047	0.043	Chicken	0.092	s,d	10	0.089
Copper	Mink	12	a		14	15	12	11	1-Day old chick	47	a		58
Lead	Rat	8.0	a		9.2	9.7	7.5	6.9	Kestrel	3.9	a		6.3
Manganese	Rat	88	a		102	106	83	75	Japanese Quail	997	a		1840
Mercury	Rat/Mink	.032/.015	a		0.076	0.099	0.015	0.0088	Mallard	0.0064	a		0.0068
Nickel	Rat	40	a		46	48	38	34	Mallard duckling	77	a		89
Selenium	Rat	0.20	a		0.19	0.19	0.20	0.21	Mallard	0.50	a		0.53
Silver	Mouse	0.18	b,d,e	100	0.18	0.19	0.15	0.13	Mallard	178	m		188
Thallium	Rat	0.0074	a		0.012	0.014	0.0060	0.0045	Starling	0.35	p		0.92
Vanadium	Rat	0.21	a		0.13	0.11	0.26	0.35	Mallard	11	b		12
Zinc	Rat	160	a		229	256	137	109	Chicken	15	a		19

NOTES:

(a) - Sample *et al*., 1996
(b) - ATSDR, 2002
(c) - USEPA, 2002
(d) - acute/subchronic study
(e) - based on a LOAEL/LD50
(f) - based on 4,4'-DDT
(g) - based on BHC mixed isomers
(h) - based on chlordane
(i) - based on endosulfan
(j) - based on endrin
(k) - UF = 10 for subchronic/acute exposure to a chronic OR from a LOAEL/LD50 to a NOAEL
(l) - NIOSH, 2002
(m) - USEPA, 1999
(n) - No avian data available, therefore no TRV calculated
(o) - based on heptachlor
(p) - Desmond, 2002
(q) - EXTOXNET, 2003
(r) - based on 2,4-D
(s) - USEPA, 2003
(t) - based on Cr^{3+}
(u) - Hudson *et al*., 1984
(v) - based on 2,4-T
(w) - based on Chromium
(x) - based on Cadmium
(y) - Murray *et al.*, 1979
(z) - Nosek *et al.*, 1992
(aa) - SIRI, 2003

NOTE: Calcium, Iron, Potassium, Magnesium and Sodium TRVs were not calculated as these analytes are considered essential nutrients.

Table III-C1
Mammalian and Avian LOAELs
Sauget, IL

					Derived LOAEL								Derived LOAEL
Chemical	Mammalian Test Species	Test Species Chronic LOAEL (mg/kg-d)	Note	Uncertainty Factor (o)	Prairie Vole LOAEL (mg/kg-d)	Short Tailed Shrew LOAEL (mg/kg-d)	Mink LOAEL (mg/kg-d)	Fox LOAEL (mg/kg-d)	AvianTest Species	Test Species Chronic LOAEL (mg/kg-d)	Note	Uncertainty Factor (o)	Osprey LOAEL (mg/kg-d)
SVOCs													
1,2,4-Trichlorobenzene	Rat	54	b		62	65	50	46	Wild bird species	10	a,n,d	10	20
1,2-Dichlorobenzene	Rat	1200	b,p		1387	1450	1127	1030	Wild bird species	4.2	a,u,d	10	8.3
1,3-Dichlorobenzene		1200	e		1387	1450	1127	1030	Wild bird species	4.2	a,u,d	10	8.3
1,4-Dichlorobenzene	Rat	150	q		173	181	141	129	Wild bird species	4.2	a,u,d	10	8.3
2,2'-oxybis (1-chloropropane)	Mouse	198	c		197	206	160	147		11	k		15
2,4,5-Trichlorophenol	Rat	30	c,d	10	35	36	28	26			g		
2,4,6-Trichlorophenol		30	f		35	36	28	26			g		
2,4-Dichlorophenol	Rat	3.0	b		3.5	3.6	2.8	2.6		1023	l		986
2,4-Dimethylphenol	Mouse	25	b		25	26	20	19		1023	l		986
2,4-Dinitrophenol	Rabbit	0.013	r,d	10	0.016	0.016	0.013	0.012	Chicken	1023	r,d	10	986
2,4-Dinitrotoluene	Dog	1.5	c		2.2	2.2	1.7	1.6		1023	l		986
2,6-Dinitrotoluene	Rat	7.0	q		8.1	8.5	6.6	6.0		1023	l		986
2-Chloronaphthalene	Mouse	60	c,d	10	60	63	49	44		11	v		22
2-Chlorophenol	Rat	5.0	c,d	10	5.8	6.0	4.7	4.3	Blackbird	11	y,d	10	22
2-Methylnaphthalene	Mouse	28500	r		28428	29710	23093	21100		11	v		22
2-Methylphenol	Mink	2190	b		2696	2818	2190	2001		9.6	m		19
2-Nitroaniline		42	s		49	51	39	36	Blackbird	75	y,d	10	75
2-Nitrophenol		7.0	t		8.1	8.5	6.6	6.0		6.5	t		8.7
3,3'-Dichlorobenzidine	Mouse	510	r,d	10	509	532	413	378			g		
3/4-Methylphenol		2190	h		2696	2818	2190	2001	Blackbird	9.6	y,d	10	19
3-Nitroaniline	Rat	42	r,d	10	49	51	39	36	Blackbird	13	y,d	10	26
4,6-Dinitro-2-Methylphenol	Rat	4.6	r,d	10	5.3	5.5	4.3	3.9	Pigeon	0.70	a,d	10	0.94
4-Bromophenyl-phenylether	Rat	8.0	c,w,d	10	9.2	9.7	7.5	6.9			g		
4-Chloro-3-methylphenol	Rat	1120	r,d	10	1295	1353	1052	961	Blackbird	11	y,d	10	22
4-Chloroaniline	Rat	13	c		14	15	12	11	Sparrow	10	y,d	10	1740
4-Chlorophenyl-phenylether	Rat	8.0	c,w,d	10	9.2	9.7	7.5	6.9			g		
4-Nitroaniline	Rat	42	r,d	10	49	51	39	36	Blackbird	7.5	y,d	10	3932
4-Nitrophenol	Rat	7.0	q,d	10	8.1	8.5	6.6	6.0	Pigeon	6.5	a,d	10	8.7
Acenaphthene	Mouse	35	c,d	10	35	36	28	26	Blackbird	10	y,d	10	20
Acenaphthylene		35	i		35	36	28	26		228	x		240
Anthracene	Mouse	1000	b		997	1042	810	740	Blackbird	11	y,d	10	22
Benzo(a)anthracene		10	j		10	10	8.1	7.4		71	j		71

NOTES:

(a) - NTP, 2003
(b) - SRSERD, 1999
(c) - USEPA, 2002
(d) - acute/subchronic study
(e) - based on 1,2-Dichlorobenzene
(f) - based on 2,4,5-Trichlorophenol
(g) - No avian data available, therefore no TRV calculated
(h) - based on 2-Methylphenol
(i) - based on Acenaphthene
(j) - based on Benzo(a)pyrene
(k) - based on Bis(2-ethylhexyl) phthalate
(l) - based on 2,4-Dinitrophenol
(m) - based on 3/4 Methylphenol
(n) - based on 2,4,5-Trichloronitrobenzene
(o) - UF = 10 for subchronic/acute exposure to chronic
(p) - based on a NOAEL x 10
(q) - ATSDR, 2002
(r) - NIOSH, 2002
(s) - based on 4-Nitroanaline
(t) - based on 4-Nitrophenol
(u) - based on 1,3 Dinitrobenzene
(v) - based on Anthracene
(w) - based on Decabromodiphenyl ether
(x) - based on Phenanthrene
(y) - Schafer *et al* ., 1983

Table III-C1
Mammalian and Avian LOAELs
Sauget, IL

					Derived LOAEL								Derived LOAEL
Chemical	Mammalian Test Species	Test Species Chronic LOAEL (mg/kg-d)	Note	Uncertainty Factor (o)	Prairie Vole LOAEL (mg/kg-d)	Short Tailed Shrew LOAEL (mg/kg-d)	Mink LOAEL (mg/kg-d)	Fox LOAEL (mg/kg-d)	AvianTest Species	Test Species Chronic LOAEL (mg/kg-d)	Note	Uncertainty Factor (o)	Osprey LOAEL (mg/kg-d)
SVOCs													
Benzo(a)pyrene	Mouse	10	a		10	10	8.1	7.4	Chicken	71	y,p		71
Benzo(b)fluoranthene		10	j		10	10	8.1	7.4		71	j		71
Benzo(ghi)perylene		10	j		10	10	8.1	7.4		71	j		71
Benzo(k)fluoranthene		10	j		10	10	8.1	7.4		71	j		71
Bis(2-chloroethoxy)methane		198	k		197	206	160	147		11	s		15
Bis(2-chloroethyl)ether		198	k		197	206	160	147		11	s		15
Bis(2-ethylhexyl)phthalate	Mouse	183	a		187	127	1178	2618	Dove	11	b		15
Butylbenzylphthalate	Rat	47	c,d	10	54	57	44	40		11	s		15
Carbazole	Mouse	30	u,d	10	30	31	24	22		g			
Chrysene		10	j		10	10	8.1	7.4		71	j		71
Dibenzo(ah)anthracene		10	j		10	10	8.1	7.4		71	j		71
Dibenzofuran	Hamster	0.13	u,d,bb	10	0.15	0.16	0.12	0.11	Blackbird	10	z,d	10	13
Diethyl phthalate	Mouse	45800	b		45252	55765	16919	11037		10	t		13
Dimethyl phthalate		45800	l		45684	47745	37110	33908	Blackbird	10	z,d	10	13
Di-n-butylphthalate	Mouse	1833	a		1860	1443	6145	10326	Dove	1.1	b		1.5
Di-n-octylphthalate		1833	m		1828	1911	1485	1357	Pheasant	88	aa,d	10	95
Fluoranthene	Mouse	25	c,d	10	25	26	20	19		71	j		71
Fluorene	Mouse	25	b		25	26	20	19	Blackbird	10	z,d	10	13
Hexachlorobenzene	Rat	0.29	c		0.34	0.35	0.27	0.25	Quail	55	v,d,p	10	84
Hexachlorobutadiene	Rat	0.20	q		0.23	0.24	0.19	0.17	Quail	32	e,p		49
Hexachlorocyclopentadiene	Rat	1.1	c,d,n	10	1.3	1.3	1.0	0.94		32	f		49
Hexachloroethane	Rat	1.5	b		1.7	1.8	1.4	1.3		32	f		49
Indeno(1,2,3-cd)pyrene		10	j		10	10	8.1	7.4		71	j		71
Isophorone	Rat	179	c		207	216	168	154		g			
Naphthalene	Rat	14	c,d	10	16	17	13	12		228	x		240
Nitrobenzene	Mouse	0.46	c,d	10	0.46	0.48	0.37	0.34	Wild bird species	4.2	h,w,d	10	5.3
N-nitroso-di-n-propylamine	Mouse	0.10	q,d	10	0.10	0.10	0.081	0.074		75	r		94
N-nitrosodiphenylamine	Rat	50	q		58	60	47	43		75	r		94
Pentachlorophenol	Rat	2.4	a		3.7	4.3	2.0	1.5	Quail	87	v,d	10	134
Phenanthrene		35	i		35	36	28	26	Mallard	228	y,p		240
Phenol	Rat	120	b		139	145	113	103	Blackbird	11	z,d	10	14
Pyrene	Mouse	13	c,d	10	12	13	10	9.3		71	j		71

NOTES:

(a) - Sample *et al* ., 1996
(b) - SRSERD, 1999
(c) - USEPA, 2002
(d) - acute/subchronic study
(e) - Schwetz *et al* ., 1974
(f) - based on Hexachlorobutadiene
(g) - No avian data available, therefore no TRV calculated
(h) - NTP, 2003
(i) - based on Acenaphthene
(j) - based on Benzo(a)pyrene
(k) -based on 2,2'-Oxybis (1-chloropropane)
(l) - based on Diethyl phthalate
(m) - based on Di-n-butylphthalate
(n) - based on BMD_{10} - Maximum likelihood estimate of dose equaling 10% risk
(o) - UF = 10 for subchronic/acute exposure to chronic
(p) - based on a NOAEL x 10
(q) - ATSDR, 2002
(r) - based on 2-Nitroanaline
(s) - based on Bis(2-ethylhexyl) phthalate
(t) - based on Dimetyl phthalate
(u) - SIRI, 2003
(v) - Hill and Camardese, 1986
(w) - based on 1,3 Dinitrobenzene
(x) - based on Phenanthrene
(y) - Windward Environmental, 2001
(z) - Schafer *et al* ., 1983
(aa) - Hill *et al* ., 1975
(bb) - Based on hamster mutation data - calculated using average rat body weight and daily water intake from Sample *et al.* , 1996.

Table III-C1
Mammalian and Avian LOAELs
Sauget, IL

					Derived LOAEL								Derived LOAEL
Chemical	Mammalian Test Species	Test Species Chronic LOAEL (mg/kg-d)	Note	Uncertainty Factor (k)	Prairie Vole LOAEL (mg/kg-d)	Short Tailed Shrew LOAEL (mg/kg-d)	Mink LOAEL (mg/kg-d)	Fox LOAEL (mg/kg-d)	AvianTest Species	Test Species Chronic LOAEL (mg/kg-d)	Note	Uncertainty Factor (k)	Osprey LOAEL (mg/kg-d)
Pesticides													
4,4'-DDD		4.0	f		2.1	1.7	5.3	7.9		0.028	f		0.024
4,4'-DDE		4.0	f		2.1	1.7	5.3	7.9		0.028	f		0.024
4,4'-DDT (DDT and metabolites)	Rat	4.0	a		2.1	1.7	5.3	7.9	Pelican	0.028	b		0.024
Aldrin	Rat	1.0	a		1.4	1.6	0.86	0.70	Bobwhite	0.66	v,e	10	1.4
alpha-BHC	Rat/Mink	3.2/0.14	a,g		4.5	5.1	0.14	0.11	Quail	23	b,g		0.15
alpha-Chlordane	Mouse	9.2	a,h		9.1	10	5.1	3.9	Blackbird	11	b,h		1231
beta-BHC	Rat	2.0	a		2.8	3.2	1.7	1.4	Quail	23	b,g		0.15
delta-BHC	Rat/Mink	3.2/0.14	a,g		4.5	5.1	0.14	0.11	Quail	23	b,g		0.15
Dieldrin	Rat	0.20	a		0.18	0.17	0.21	0.23	Barn Owl	0.77	b		0.98
Endosulfan-I	Rat	1.5	b,i		4.3	5.9	0.95	0.49	Partridge	100	b,i		131
Endosulfan-II	Rat	1.5	b,i		4.3	5.9	0.95	0.49	Partridge	100	b,i		131
Endosulfan sulfate	Rat	1.5	b,i		4.3	5.9	0.95	0.49	Partridge	100	b,i		131
Endrin	Mouse	0.92	a		0.92	0.94	0.82	0.78	Screech Owl	0.10	b		0.17
Endrin Aldehyde		0.92	j		0.92	0.94	0.82	0.78		0.10	j		0.17
Endrin Ketone		0.92	j		0.92	0.94	0.82	0.78		0.10	j		0.17
gamma-BHC (Lindane)	Rat	80	b		203	269	53	30	Mallard	20	b		25
gamma-Chlordane	Mouse	9.2	a,h		9.1	10	5.1	3.9	Blackbird	11	b,h		1231
Heptachlor	Mink	1.0	a		0.74	0.70	1.0	1.1	Quail	0.65	o,n		1.0
Heptachlor epoxide	Dog	0.013	d		0.0075	0.0070	0.010	0.011		0.65	p		1.0
Methoxychlor	Rat	8.0	a		4.7	4.0	10	14	Chicken	1450	r,n		1398
Toxaphene	Rat	80	b		79	79	80	81	Black duck	10	b		9.8
Herbicides													
2,4-D (herbicide)	Rat	5.0	d		8.1	9.4	4.1	3.0	Quail	67	r,e	10	53
2,4-DB	Dog	2.5	d,e	10	8.3	9.6	4.1	3.1		67	s		53
2,4,5-T	Rat	10	d		12	12	9.4	8.6	Pheasant	50	v,e	10	77
2,4,5-TP (Silvex)	Dog	2.5	d		3.6	3.7	2.9	2.7		50	w		77
Dalapon	Rat	29	d		33	35	27	25	Quail	100	r,e	10	154
Dicamba	Rabbit	10	d		12	13	10	9.2	Quail	125	r,e	10	192
Dichloroprop	Mouse	2.0	l,e	10	2.0	2.1	1.6	1.5			m		
Dinoseb	Rat	1.0	d		1.2	1.2	0.94	0.86	Quail	0.70	r,e	10	1.1
MCPA	Dog	0.75	d		1.1	1.1	0.87	0.80	Quail	38	r,e	10	58
MCPP	Rat	0.90	d,e	10	1.0	1.1	0.85	0.77	Quail	70	r,e	10	108
PCBs													
Total PCBs	Rat	1.0	z,e	10	1.2	1.2	0.94	0.86	Quail	50	z		77
Dioxins/Furans													
2,3,7,8-TCDD	Rat	0.000010	aa		0.000012	0.000012	0.0000094	0.0000086	Ring-necked pheasant	0.000014	bb,e	10	0.000015
Metals													
Aluminum	Mouse	19	a		19	20	16	14	Dove	1100	b		1471
Antimony	Mouse	1.3	a		1.2	1.3	1.0	0.93		5.0	x		6.7
Arsenic	Mouse	1.3	a		1.3	1.4	0.81	0.67	Mallard	13	b		17
Barium	Rat	20	a		37	44	15	10	1-Day old chick	42	b		69
Beryllium	Rat	6.6	b		7.6	8.0	6.2	5.7		20	y		21
Cadmium	Rat	10	a		39	58	5.6	2.4	Mallard	20	b		21
Chromium (6+)	Rat	13	a		15	16	12	11	Black Duck	5.0	a,u		6.7
Cobalt	Rat	0.50	c		0.58	0.60	0.47	0.43	Chicken	0.46	t,e	10	0.44
Copper	Mink	15	a		19	20	15	14	1-Day old chick	62	b		76
Lead	Rat	80	a		92	97	75	69	Kestrel	39	a,n		63
Manganese	Rat	284	a		328	343	267	244	Japanese Quail	9970	a,n		18396
Mercury	Rat/Mink	0.16/0.025	a		0.38	0.49	0.025	0.015	Mallard	0.064	a		0.068
Nickel	Rat	80	a		92	97	75	69	Mallard duckling	107	b		123
Selenium	Rat	0.33	a		0.32	0.32	0.33	0.34	Mallard	1.0	b		1.1
Silver	Mouse	1.8	c,e	10	1.8	1.9	1.5	1.3	Mallard	1780	o,n		1877
Thallium	Rat	0.074	a		0.12	0.14	0.060	0.045	Starling	3.5	q,n		9.2
Vanadium	Rat	2.1	a		1.3	1.1	2.6	3.5	Mallard	114	b		120
Zinc	Rat	320	a		459	512	274	219	Chicken	131	a		171

NOTES:
(a) - Sample *et al* ., 1996
(b) - SRSERD, 1999
(c) - ATSDR, 2002
(d) - USEPA, 2002
(e) - acute/subchronic study
(f) - based on 4,4'-DDT
(g) - based on BHC mixed isomers
(h) - based on chlordane
(i) - based on endosulfan
(j) - based on endrin
(k) - UF = 10 for subchronic/acute exposure to chronic
(l) - NIOSH, 2002
(m) - No avian data available, therefore no TRV calculated
(n) - based on a NOAEL x 10
(o) - USEPA, 1999
(p) - based on heptachlor
(q) - Desmond, 2002
(r) - EXTOXNET, 2003
(s) - based on 2,4-D
(t) - USEPA, 2003
(u) - based on Cr^{3+}
(v) - Hudson *et al* ., 1984
(w) - based on 2,4,5-T
(x) - based on Chromium
(y) - based on Cadmium
(z) - SIRI, 2003
(aa) - Murray *et al* ., 1979
(bb) - Nosek *et al* ., 1992

NOTE: Calcium, Iron, Potassium, Magnesium and Sodium TRVs were not calculated as these analytes are considered essential nutrients.

Table III-C1
References and Calculations for TRVs
Sauget, IL

References

1) Agency for Toxic Substances and Disease Registry (ATSDR). 2002. Minimal Risk Levels for Hazardous Substances. www.atsdr.cdc.gov/mrls.html.

2) Desmond, W.P., PhD. 2002. Draft Final Phase I Ecological Risk Assessment. Deseret Chemical Depot; Tooele Chemical Agent Disposal Facility (TOCDF); EPA I.D. No. UT 5210090002.

3)Extension Toxicology Network (EXTOXNET). 2003. http://ace.orst.edu/info/extoxnet/ghindex.html.

4) Hill, E. F., M. B. Camardese. 1986. Lethal Dietary Toxicities of Environmental Contaminants and Pesticides to Coturnix. U.S. Fish and Wildlife Service, Fish and Wildlife Technical Report 2.

5) Hill, E. F., R. G. Heath, J. W. Spann, and J.D. Williams. 1975. Lethal Dietary Toxicities of Environmental Pollutants to Birds. U.S. Fish and Wildlife Service, Special Scientific Report-Wildlife 191:1-61.

6) Hudson R. H., R. K. Tucker, and M. A. Haegele. 1984. Handbook of Toxicity of Pesticides to Wildlife. U.S. Fish and Wildlife Service, Resource Publication 153.

7) Murray, F.J., F.A. Smith, K.D. Nitschke, C.G. Humiston, R.J. Kociba, and B.A. Schwetz. 1979. Three-Generation Reproduction Study of Rats Given 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in the Diet. Toxicology and Applied Pharmacology. 50: 241-252.

8) Nosek, J.A., S.R. Craven, J.R. Sullivan, S.S. Hurley, and R.E. Peterson. 1992. Toxicity and Reproductive Effects of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin in Ring-necked Pheasant Hens. Journal of Toxicology and Environmental Health. 35: 187-198.

9) National Institute for Occupational Safety and Health (NIOSH). 2002. The Registry of Toxic Effects of Chemical Substances. www.cdc.gov/niosh/rtecs.html.

10) National Toxicology Program (NTP). 2003. http://ntp-server.niehs.nih.gov/.

11) Sample, B.E., and C.A. Arenal. 1999. Allometric Models for Interspecies Extrapolation of Wildlife Toxicity Data. Bull.Environ. Contam. Toxicol. 62:653-663.

12) Sample, B.E., D.M. Opresko, and G.W. Suter II. 1996. Toxicological Benchmarks for Wildlife: 1996 Revision. ES/ER/TM-86/R3.

13) Savannah River Site Environmental Restoration Division (SRSERD). 1999. Regulatory Document Handbook. ERD-AG-003: P.7.3.

14) Schafer, E. W. Jr., W. A. Bowles, Jr., and J. Hurlbut. 1983. The Acute Oral Toxicity, Repellency, and Hazard Potential of 998 Chemicals to One or More Species of Wild and Domestic Birds. Arch. Environm. Contam. Toxicol. 12: 355-382.

15) Schwetz, B.A., J.M. Norris, R.J. Kociba, P.A. Keeler, R.F. Cornier, and P.J. Gehring. 1974. Reproduction Study in Japanese Quail Fed Hexachlorobutadiene for 90 Days. Toxicology and Applied Pharmacology. 30:255-265.

16) United States Environmental Protection Agency (USEPA). 1999. Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities. EPA530-D-99-001A.

17) USEPA. 2002. Integrated Risk Information System (IRIS). www.epa.gov/iris.

Table III-C1
References and Calculations for TRVs
Sauget, IL

References (Cont.)

18) USEPA. 2003. Draft Ecological Soil Screening Level for Cobalt - Interim Final.

19) Vermont Safety Information Resources, Inc. (SIRI). 2003. http://hazard.com/msds/index.php.

20) Windward Environmental, LLC. 2001. Final Ecological Risk Assessment: Current and Future Scenarios. http://avilapierstatus.org/pdfs/ERA.pdf.

Calculations

NOAEL TRVs:

Mammalian Species[a]	Avian Species[a]
$NOAEL_w = NOAEL_t \times (BW_t / BW_w)^{1-x}$	$NOAEL_w = NOAEL_t \times (BW_t / BW_w)^{1-x}$

$NOAEL_w$ = No observable adverse effects level for the wildlife species.

$NOAEL_t$ = No observable adverse effects level for the laboratory test species.

BW_w = Body weight of the wildlife species.

BW_t = Body weight of the laboratory test species.

x = Allometric scaling factor

[a] - Calculation from Sample and Arenal, 1999. (Note: A default scaling factor of 0.94 was used for mammals and 1.2 for avian species)

Note: An uncertainty factor of ten was used for extrapolating from a LOAEL/LD_{50} to a NOAEL or from an acute/subchronic value to a chronic value.

LOAEL TRVs:

Mammalian Species[a]	Avian Species[a]
$LOAEL_w = LOAEL_t \times (BW_t / BW_w)^{1-x}$	$LOAEL_w = LOAEL_t \times (BW_t / BW_w)^{1-x}$

$LOAEL_w$ = Lowest observable adverse effects level for the wildlife species.

$LOAEL_t$ = Lowest observable adverse effects level for the laboratory test species.

BW_w = Body weight of the wildlife species.

BW_t = Body weight of the laboratory test species.

x = Allometric scaling factor

[a] - Calculation from Sample and Arenal, 1999. (Note: A default scaling factor of 0.94 was used for mammals and 1.2 for avian species)

Notes: An uncertainty factor of ten was used for extrapolating from an acute/subchronic value to a chronic value.
If a LOAEL value was not available, the NOAEL was multiplied by ten to estimate the LOAEL.

Table III-C2
Toxicity Equivalency Factors (TEFs) for Wildlife
Sauget, IL

Dioxin/Furan Congeners	Mammals	Fish	Birds
1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin	0.010	0.0010	0.0010
1,2,3,4,6,7,8-HpCDF	0.010	0.010	0.010
1,2,3,4,7,8,9-HpCDF	0.010	0.010	0.010
1,2,3,4,7,8-Hexachlorodibenzo-P-Dioxin	0.10	0.50	0.050
1,2,3,4,7,8-HxCDF	0.10	0.10	0.10
1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin	0.10	0.010	0.010
1,2,3,6,7,8-HxCDF	0.10	0.10	0.10
1,2,3,7,8,9-Hexachlorodibenzo-P-Dioxin	0.10	0.010	0.10
1,2,3,7,8,9-HxCDF	0.10	0.10	0.10
1,2,3,7,8-Pentachlorodibenzofuran	0.050	0.050	0.10
1,2,3,7,8-Pentachlorodibenzo-P-Dioxin	1.0	1.0	1.0
2,3,4,6,7,8-HxCDF	0.10	0.10	0.10
2,3,4,7,8-PeCDF	0.50	0.50	1.0
2,3,7,8-TCDD	1.0	1.0	1.0
2,3,7,8-Tetrachlorodibenzofuran	0.10	0.050	1.0
OCDD	0.00010	0.00010*	0.00010*
OCDF	0.00010	0.00010	0.00010
Total HpCDD	0.010	0.0010	0.0010
Total HpCDF	0.010	0.010	0.010
Total HxCDD	0.10	0.50	0.10
Total HxCDF	0.10	0.10	0.10
Total PeCDD	1.0	1.0	1.0
Total PeCDF	0.50	0.50	1.0
Total TCDD	1.0	1.0	1.0
Total TCDF	0.10	0.050	1.0

Source: Van den Berg *et al* ., 1998
* = Values not available for fish or birds, therefore, the TEF presented was based on the mammalian value.

Appendix III-D

Fate and Transport Processes for COPECs

Neither chemical concentrations nor chemical structures remain constant in the environment. When a chemical is released into the environment, it may be transported, transformed, and/or accumulated in one or more media. This Appendix summarizes the transport and transformation processes applicable to COPECs at the Sauget Site 2, which are:

- physical transport - which occurs when chemicals volatilize from soil, sediment, or surface water and diffuse into pore spaces or into the atmosphere.
- chemical transformation - which involves natural chemical reactions in soil, sediment, or surface water to change the structure of the compounds (*e.g.,* photolysis, sorption, biodegradation).

Collectively, these processes are called natural attenuation (USEPA, 1985). Processes that affect chemical residuals detected in soil within Areas O-S and pond water are summarized below.

D1. VOLATILIZATION

Volatilization is the transfer of matter from the dissolved phase to the gaseous phase. Volatilization rates are chemical-specific and are dependent on the physical and chemical properties of each compound (USEPA, 1985). Several classes of compounds have been detected at Site 2 including SVOCs, pesticides, herbicides, PCBs, dioxins/furans, and metals. Some of these compounds are more likely to volatilize than others, such as the SVOCs and some herbicides. Metals rarely volatilize unless transformed into an organo-metallic compounds, such as mercury. A measure of volatility is the Henry's Law Constant, with higher values indicating greater volatility.

D1.1 TERRESTRIAL COPECS

In general, volatilization from soil is not a significant transport pathway for many of the SVOCs including chrysene (ATSDR, 1995a), bis(2-chloroethoxy)methane (Zeiger, 1998), and dibenzofuran (Spectrum Laboratories, 2003b). However, N-nitroso-di-n-propylamine volatilizes quickly in surface soil (half-life of two to six hours) but it does not volatilize in subsurface soils (ATSDR, 1989).

Volatilization is a significant transport pathway for some of the pesticides/herbicides. In silty sand, approximately 12% of endosulfan is volatilized after 24 hours and 60% from plant surfaces (ATSDR, 2000a). Despite a low vapor pressure, approximately 20 to 30% of endrin volatilizes into the atmosphere after an agricultural application thereby significantly decreasing the amount of endrin on plant surfaces (ATSDR, 1996a). MCPA can volatilize into the atmosphere, sorb to airborne soil particles and moisture in clouds, then redeposit on the landscape as rain (Donald et al., 2001). However, volatilization of dinoseb and heptachlor epoxide is not expected to be significant (ATSDR, 1993c; Spectrum Laboratories, 2003c).

PCBs volatilize from both soil and water and are transported throughout the atmosphere via volatilization/deposition cycles. PCBs tend to volatilize more rapidly from soil with low organic content. Biphenyl and monochlorobiphenyl tend to remain in the atmosphere. Monochlorobiphenyl through tetrachlorobiphenyls will gradually migrate into the atmosphere to polar latitudes while tetrachlorobiphenyls through octachlorobiphenyls remain in the mid-latitude atmosphere. Octachloro- and nonachlorobiphenyls remain close to the contaminant source. (ATSDR, 2000). TCDD undergoes rapid volatilization in soil (Hrudey et al., 1996).

D1.2 AQUATIC COPECS

Dinitrocresols dissociate and form hydrogen bonds with water reducing its vapor pressure, so volatilization is not a significant degradation pathway for this compound (ATSDR, 1995b). Volatilization of bis(2-chloroethoxy)methane is a slow process from dry soil and negligible from wet soil (Spectrum Laboratories, 2003a).

Volatilization is a major degradation pathway for DDT and its metabolites DDE and DDD where the compounds are transported throughout the atmosphere. The half-life for DDT is several hours to 50 hours. DDD volatilizes five times less than DDT or DDE (ATSDR, 1994).

Photolysis is a significant abiotic degradation pathway in water for PCBs. The photolysis half-life in shallow water (less than 0.5 meters) for less chlorinated congeners (mono- to tetrachlorinated biphenyls) ranges from 17 to 210 days in summer. More highly chlorinated congeners are sequestered in sediments (ATSDR, 2000b). Volatilization of chlorinated dioxins is rapid in surface waters with half-lives of 32 days in ponds and lakes and 16 days in rivers (ATSDR, 1998).

D2. PHOTOLYSIS/PHOTOOXIDATION

Photolysis and photooxidation are the result of the decomposition of molecules through the absorption of light (USEPA, 1985).

D2.1 TERRESTRIAL COPECS

PAHs are readily photooxidized and the most important factor in the decay of particle-sorbed PAHs in the atmosphere. Photodegradation is a significant degradation pathway in soil for Dinoseb (EXTOXNET, 1993a), N-nitroso-di-n-propylamine (ATSDR, 1989), endosulfan (under alkaline conditions) (ATSDR, 2000a), and endrin (ATSDR, 1996a). Photolysis of heptachlor in the surface layer yields heptachlor epoxide (Miglioranza et al., 2003). Heptachlor epoxide is converted to intermediate and final photoproducts when exposed to sunlight or ultraviolet light on the surface of plants (ATSDR, 1993c).

Photodegradation of dibenzofuran occurs quickly by photochemical produced hydroxyl radicals as evidenced by a half-life of 11.3 hours (Spectrum Laboratories, 2003b). MCPA is stable to photolysis in soils because it is applied post-emergence to growing crops and the crop canopy protects residues reaching the soil. MCPA can degrade in water through photodegradation (Spectrum Laboratories, 2003d).

Photolysis of PCBs may occur in surface soil; however, it is an insignificant degradation pathway (ATSDR, 2000b).

The dominant transformation processes affecting chlorinated dioxins (CDDs) have shown to be surface photolysis (ATSDR, 1998; Hrudey et al., 1996). In a study completed after eight years of aerial spraying of 2,4,5-T at Eglin Air Force Base in Florida where approximately 2.8 kg of TCDD was applied, no indications of adverse ecological impacts were observed from contaminating dioxins contained within 2,4,5-T. Much of the TCDD was photodegraded such that less than one percent was left in the soil and approximately 5% was estimated to be lost annually due to volatilization. Although Eglin AFB receives an annual rainfall of approximately 150 cm, TCDD did not leach into the sandy soil as it is strongly adsorbed. The biodegradation half-life was estimated at 10 to 12 years. No animal deaths were recorded (Young, 1983).

D2.2 AQUATIC COPECS

Many of the aquatic COPECs are readily photodegraded. Photolysis and biodegradation are the dominant degradation pathways in surface water for pentachlorophenol – its half-life is approximately 3.5 hours at pH 7.3 in surface water. However, photolysis attenuates at increasing water depth (ATSDSR, 1994b). DDE absorbs short-wave uV radiation and undergoes rapid photolysis within 0.94 to 6.1 days. DDE also undergoes photoisomerization and the photoisomers are slower to photolyzed than the parent compounds (ATSDR, 1994). Aldrin is degraded by ultraviolet radiation or microbial action into the compound photo dieldrin (ATSDR, 1993b). However, MCPP does not readily photodegrade in water (USEPA, 1988b).

Photolysis in CDDs is a major route of degradation in aqueous solutions; however, it is slow unless an organic hydrogen donor, such as petroleum hydrocarbons is present. The less chlorinated congeners are degraded faster than more chlorinated congeners and those congeners with chlorines in the lateral positions (e.g., 2,3,7,8-TCCD) are more susceptible than the chlorines in the *para* positions (1,4,6,9-TCDD). The half-life in water is approximate 118 hours in winter, 51 hours in fall, 27 hours in spring and 21 hours in summer (ATSDR, 1998).

D3. SORPTION

Sorption is the binding of chemical residuals to soil particles. The relative strength of this binding is measured by the organic carbon partition coefficient (K_{oc}), such that the higher the K_{oc}, the greater the affinity the compound has bind to soil particles. In general, adsorption of contaminants increases with increasing organic content in soil. The extent of metals' adsorption to soil is measured as K_d and is defined as the ratio of the concentration adsorbed to the soil surface to the concentration in soil pore water (Dragun, 1998).

Sorption is important to biological systems in that it is one of the factors governing bioavailability. Whether a COPEC is bound to soil or the gastrointestinal (GI) tract lining, it is not available for systemic circulation and would preclude toxicological effects. Sorption is also affected by such factors as pH, especially in metals; decreasing pH yields increasing mobility.

D3.1 SVOCs

SVOCs with log K_{oc} values greater than three indicate an affinity to sorb to soil. High molecular weight PAHs such as chrysene have a greater tendency to sorb to soil, based on increasing K_{oc} values (ATSDR, 1995a). PCP adsorption is Ph dependent such that sorption decreases with neutral and basic soils and increases with increasing acidity (ATSDR, 1994b).

Hexachlorobenzene sorbs strongly to soils and sediments and will be transported by silts during flooding rather than remaining in the dissolved phase. Hexachlorobenzene is reported as a contaminant in sediments associated with river systems of the Mississippi River drainage area (ATSDR, 1996b). Hexachlorobutadiene adsorbs to sediments with high organic content, based on a log K_{oc} of 3.67. It is mobile in sandy sediments with low organic content (ATSDR, 1994b). Nitrophenols partitioning between the water and sediment interface are dependent on pH. Sorption is correlated with iron oxide, clay and silt contents (ATSDR, 1992d). Bis (2-chloroethoxy)methane has a low affinity for sorption (log 2.0); therefore, it would most likely be mobile in soil (Spectrum Laboratories, 2003a).

D3.2 PESTICIDES/HERBICIDES

TOC is the most important organochlorine pesticide (OCP) sorbent along with other factors such as particle size characteristics, organic matter composition and physico-chemical characteristics (Miglioranza et al., 2003). Dieldrin, heptachlor epoxide and endrin are persistent in soil as these compounds adsorb strongly. Thus, it is likely that these compounds will not leach to groundwater (ATSDR, 1993b; ATSDR, 1993c; ATSDR, 1996a). Endosulfan (log K_{oc} of 3.3) (ATSDR, 2000a) and MCPA/MCPP (log K_{oc} 2.0) do not adsorb well onto soil and will easily leach. However, mobility decreases with increasing organic matter in soil. MCPA/MCPP are persistent under reducing conditions (e.g., -120mV) (Vink and van den Zee, 1997).

One of the dominant fate processes for 4,4, DDE is sorption whether it is to biota, suspended particulate matter, sediments, or soils (ATSDR, 1994c).

D3.3 PCBs

Highly chlorinated (7-10 chlorines) PCBs, present in low concentrations, are tightly bound to soil, sediment, and organic matter. In general, log K_{oc} values range from 3.27 for biphenyl to 6.08 for hexachlorobiphenyl. Log K_{oc} values for PCBs 8, 52, and 153 in soils with variable organic carbon contents (0.2-2.3% by weight) are 1.87-2.92, 2.73-3.74, and 4.15-4.84, respectively indicating that these compounds do not leach to groundwater (ATSDR, 2000).

In surface water, PCBs exist in three phases: dissolved, particle-associated, and colloid-associated. Dissolved PCBs consist of the less chlorinated congeners and will readily partition to the vapor phase. Highly chlorinated, less soluble congeners are associated with the particles and colloids and do not exchange with the vapor phase. In the water column, the ratio between particle-bound PCBs to dissolved is 2:1 (ATSDR, 2000b).

Highly chlorinated (*ortho*-poor) PCB congeners can be sequestered in aquatic sediments for relatively long periods. In the Great Lakes, half-lives based on sedimentation and volatility are 11 (di), 15 (tri), 10, (tetra), 12 (penta), 5.3 (hexa), 7 (hepta), and 5 (octa) (ATSDR, 2000b).

D3.4 Dioxins/Furans

TCDD has low water solubility but a high K_{oc} indicating that it readily bound to soil and is immobile (ATSDR, 1998; Hrudey et al., 1996). Approximately 70 to 80% of dioxin is removed from the water column through sorption to sediment precluding volatilization or bioaccumulation (ATSDR, 1998).

D3.5 Metals

The ability of metals to sorb to soil is dependent on speciation (*i.e.*, trivalent cations are preferentially adsorbed over divalent cations which are preferentially adsorbed over monovalent cations) and soil properties (Dragun, 1998).

Increasing K_d indicates increasing affinity for soil and a decreasing concentration of dissolved metal in the pore water (Allen, 2002). The fraction of total metals that are dissolved in the pore

water solution is dependent on the metal. For example, the percentage of total dissolved metals in pore water for copper and lead is between 0.001% and 0.01%; for cadmium, the percentage is 0.05% to 15% and 0.001% to 5% for zinc (Allen, 2002). Some of the metal COPECs (*e.g.,* arsenic, barium, lead, silver) will react with metal oxides and hydroxides or complex with other metals or organics in soils rendering them immobile and not bioavailable (ATSDR, 1992b; Eisler, 2000).

Aluminum. Aluminum is a naturally occurring, abundant mineral found in silicates, micas, feldspar, cryolite and bauxite (ATSDR, 1999) at concentrations between 0.45 and 10% (Pendias and Pendias, 1992). Aluminum is not a free metal in nature but is only found as the trivalent ion (Al^{3+}). It reacts with chlorine, fluorine, sulfate, nitrate, phosphate and other negatively charged functional groups found in humic materials and clay (ATSDR, 1999). Aluminum salt coagulants are used in potable drinking water (Pendias and Pendias, 1992).

Transport and partitioning is affected by chemical properties. At pHs between 5 and 8 and with weathering, aluminum forms an insoluble hydroxide [$Al(OH)_3$] or aluminosilicate that are the structural components of clays (ATSDR, 1999; Pendias and Pendias, 1992). Clays may act as a sink or source for soluble aluminum, depending on the degree of aluminum saturation (ATSDR, 1999). Acidification causes mobility (ATSDR, 1999; Pendias and Pendias, 1992), increasing pH (i.e., at pH 5 to 6), aluminum complexes with phosphate and precipitates out of solution (ATSDR, 1999).

Arsenic. Arsenic occurs in over 200 naturally occurring compounds. It is readily soluble. It is found in three oxidation states – elemental (As^0), trivalent (As^{3+}), and pentavalent (As^{5+}). The elemental and trivalent forms are characteristic of reducing environments. Various oxidized forms (AsO_2-, AsO_4^{3-}, $HAsO_4^{2-}$, and H_2AsO_3- are common soluble forms of arsenic. Under most environmental conditions, the pentavalent arsenic is in the form of $H_2AsO_4^-$. The most dominant species found in acidic reducing conditions is H_3AsO_3 (Pendias and Pendias, 1992). Arsenic strongly sorbed to soils and is not likely to desorb unless it combines with iron or aluminum oxides and liberated with hydrolysis and with the reduction of soil potential (Pendias and Pendias, 1992).

The lowest arsenic levels are found in sand (Pendias and Pendias, 1992); however, arsenic accumulates in soils where the organic form is complexed and chelated by organic material, iron, aluminum, and calcium. Arsenic can undergo a series of transformation processes in when bound to soil such as oxidation-reduction, methylation, volatilization, leaching, adsorption, and precipitation (Hrudey et al., 1996).

Barium. Common concentration ranges for barium are between 400 and 1200 ppm. It is associated with potassium. Barium is not usually mobile as it is sorbed to oxides and hydroxides and easily precipitates as a sulfate or carbonate (Pendias and Pendias, 1992).

Natural water contains high levels of barium sulfate ($BaSO_4$) and organic matter complexes. It precipitates out of solution as insoluble salts ($BaSO_4$ or $BaCO_3$). Barium also adsorbs to suspended particulate matter within the water column. In sediments, barium is found as the sulfate form (ATSDR, 1992b).

Cadmium. Average cadmium concentrations in soil range between 0.06 and 1.1 ppm. The amount bound to soil is stable and it undergoes competitive adsorption on clays. Cadmium solubility is dependent on pH so that it is most mobile in slightly acidic (pH 4.5-5.5) soils but immobile in alkaline soils. Sources of cadmium include sewage sludge and phosphate fertilizers (Pendias and Pendias, 1992).

Chromium. In most soils, chromium exists as the trivalent form (Cr^{3+}) and is within mineral structures or forms of mixed chromic (Cr^{3+}) and ferric (Fe^{3+}) oxides. Trivalent chromium is only slightly mobile in very acidic media; at pH 5.5 it will precipitate out. Thus, chromic compounds are considered stable in soil. Hexavalent chromium (Cr^{6+}) is unstable in soil and in easily mobilized in alkaline or acidic soils. However, hexavalent chromium is easily reduced to the trivalent form in most soil (Pendias and Pendias, 1992). Adsorption is not a major degradation process for hexavalent chromium (K_d up to 37) but is for trivalent chromium (K_d up to 150,000) (Dragun, 1998; Eisler, 2000).

Cobalt. Cobalt is a naturally occurring element found in soil and water. In large rivers, cobalt may be found in the following ranges (ATSDR, 1992c):

Cobalt Ranges	Unpolluted River	Contaminated River
Dissolved	1.6-1.6%	12%
Adsorbed	4.7-8%	27%
Precipitated w/mineral oxides (e.g., iron/manganese)	27-29%	19%
Precipitated w/carbonates and hydroxides	12-19%	15%
Crystalline aluminosilicates	44-51%	27%

Cobalt abundance in sedimentary rock is between 0.1 to 20 ppm and it is associated with clay minerals or organic matter (Pendias and Pendias, 1992). In soil and in water, cobalt is retained by oxides (e.g., iron and especially manganese), crystalline materials (e.g., clays, aluminosilicate, goethite), and natural organic substances that render it insoluble in water (ATSDR, 1992c; Pendias and Pendias, 1992). In water, cobalt will precipitate out as the carbonate and hydroxy forms (ATSDR, 1992c).

The mobility of cobalt decreases with increasing soil pH and in reducing conditions (ATSDR, 1992c; Pendias and Pendias, 1992). As cobalt is an organic complexing agent, bioavailability of inorganic cobalt is reduced in plants (ATSDR, 1992c).

Copper. Copper is naturally occurring at levels around 50 ppm in the earth's crust and the following average concentration in variously used soils (ATSDR, 1990a):

- 13-24 ppm natural (Pendias and Pendias, 1992)
- 25 ppm agricultural
- 50 ppm suburban/residential
- 100 ppm mixed residential/industrial
- 175 ppm industrial/inner urban

Copper adsorbs to organic matter, carbonate and clay minerals, hydrous iron and manganese oxides, and phosphates (ATSDR, 1990a; Pendias and Pendias, 1992). If organic matter is low, then the mineral content or the iron/manganese/aluminum oxides become important in determining copper adsorption (ATSDR, 1990a).

Lead. The primary form of lead in the natural state is galena or lead sulfide (PbS) (as divalent lead, Pb^{2+}). With weathering, galena slowly oxidizes to form carbonates which are incorporated into soils and sediment consisting of clay minerals, iron and manganese oxides and organic matter rendering these lead compounds insoluble (Hrudey et al., 1996; Pendias and Pendias, 1992). In alkaline soils, lead precipitates out as hydroxide, phosphate and carbonate compounds that further promote the formation of stable lead-organic complexes. Lead has the ability to replace potassium, barium, strontium, and calcium. Natural lead occurs at concentrations ranging from 10 to 67 ppm with an average of 32 ppm (Pendias and Pendias, 1992).

Mercury. Mercury is a naturally occurring element ranging in soils from 50 to 300 ppb. A common oxidation state is the divalent form (H^{2+}) that can be reduced by several bacterial and yeast species to elemental mercury. Elemental mercury (Hg^0) is volatile but develops strong bonds with sulfur and organic matter to form organo-mercury compounds, which are stable in aqueous media. The adsorption of mercury in clays is limited and controlled by organic complexation and precipitation. The mobility of mercury requires dissolution processes and biochemical degradation of theses organo-mercury compounds. (Pendias and Pendias, 1992).

Selenium. Selenium occurs naturally at average concentrations of 33 ppm. The oxidation state and solubility of selenium are controlled by the oxidation-reduction regime and the environmental pH. In well-drained mineral soils that are pH neutral, selenites exist exclusively, which are rapidly and nearly completely fixed by iron oxides and other oxides; these compounds are only slightly bioavailable. In alkaline and well-oxidized soils, selenates exists which are easily soluble and readily bioavailable to plants. In acid-gley soils and soils with high organic matter content, selenides and selenium sulfides dominate which are only slightly mobile and are not bioavailable. Biological methylation is common. In sediments, selenium is associated with the clay fraction and occurs at concentrations less than one ppm. The presence of phosphate and sulfate reduce selenium adsorption. Sources of selenium include the combustion of coal (Pendias and Pendias, 1992).

Silver. The common concentration range for naturally occurring silver is 0.03 to 0.09 ppm (Pendias and Pendias, 1992). The mobility of silver in soil is affected by drainage (it is removed from well-drained soil), Eh, pH, and the presence of organic matter (which act to immobilize

silver). Silver is immobile in soil if the pH is greater than 4 as it complexes with iron and manganese (ATSDR, 1990; Irwin *et al.*, 1997). Manganese oxides are the most significant adsorbent for silver (Pendias and Pendias, 1992). Under oxidizing condition, the prevalent forms are the bromides, chlorides, and iodides; under reducing conditions, silver is the free metal or silver sulfide. In natural waters, silver exists as metalloorganic complexes or adsorbed to organic materials (Irwin *et al.*, 1997).

Thallium. Thallium concentrations in US soils range between 0.02 and 2.8 ppm. Thallium occurs in three oxidation states – Tl^{+}, Tl^{2+}, and Tl^{3+}. It has an affinity to micaceous minerals and is fixed *in situ* by clays and gels of manganese and iron oxides. Thallium sorbs to organic matter under reducing conditions but when weathered, it is readily mobilized and transported with alkaline metals (Pendias and Pendias, 1992).

Vanadium. Vanadium is found in the earth's crust at an average concentration of 150 mg/kg (ATSDR,1992f). Loam and silty soils contain large amounts of vanadium – usually exceeding the amounts of the parent material (Pendias and Pendias, 1992). Fossil fuels contain vanadium and it is found in all coals used in the US (eastern – 30 ppm; interior – 34 ppm; western – 15 ppm) (ATSDR,1992f). Crude petroleum oil contains between 1 to 400 g/metric ton of vanadium (ATSDR, 1992f; Pendias and Pendias, 1992).

Vanadium occurs in four oxidations states – divalent (V^{2+}), trivalent (V^{3+}), tetravalent (V^{4+}), and pentavalent(V^{5+}). Oxidation states are influenced by pH, oxidation-reduction potential, and the presence of particulates (ATSDR, 1992f). Trivalent and pentavalent vanadium binds strongly to mineral and biogenic surfaces by adsorption and complexation (ATSDR, 1992f; Pendias and Pendias, 1992). Vanadium mobility decreases in acidic, reduced, saturated soils and fairly mobile in neutral and alkaline soils. The most common forms in water are VO^{2+}, $VO(OH)^{+}$, $H_2VO_4^{-}$, and HVO_4^{2-} (ATSDR, 1992f).

Vanadium forms complexes of cationic and anionic oxides and hydroxy oxides. It doesn't form its own minerals but replaces other metals (e.g., iron, titanium, aluminum) in crystal structures. It is adsorbed and incorporated in minerals structures of clays and iron oxides and is associated with organic matter, manganese, and potassium in soil (ATSDR, 1992f).

D4. BIODEGRADATION

Microorganisms, such as bacteria and fungi, use chemical residuals as food sources, an attenuation process called biodegradation, which usually results in decreased COPEC concentrations and decreased toxicity. Biodegradation of organic compounds has been extensively reported in the scientific literature.

D4.1 SOIL

Most of the organic COPECs detected at the Site are biodegradable; however, certain compounds degrade more quickly than others.

SVOCs. The biodegradation of PAHs is dependent, among other factors, on its molecular weight. Chrysene is a high molecular weight PAHs with a biodegradation half-life between 371-387 days (ATSDR, 1995; Howard, 1991).

Dibenzofuran is readily biodegraded by adapted microbes under aerobic conditions. Anaerobic biodegradation occurs but at a much slower rate (Spectrum Laboratories, 2003b). A yeast strain, *Trichosporon mucoides* was isolated from dioxin-contaminated soil and is capable of cleaving the aromatic structure of dibenzofuran (Hammer, et al., 1998).

Hexachlorobenzene is not significantly degraded by either abiotic or biotic processes. Its half-life in soil ranges from three to six years. Anaerobic degradation is by reductive dechlorination to form tri- and dichlorobenzenes (ATSDR, 1996b).

Biodegradation is the dominant removal process of N-nitroso-di-n-propylamine in subsurface soils. The aerobic half-life is between 14 and 40 days; the anaerobic half-life is between 47 and 80 days (ATSDR, 1989).

Pentachlorophenol is readily biodegraded under aerobic or anaerobic conditions in soil. The half-life of pentachlorophenol in aerobic soil is approximately 0.36 days and 192 days under anaerobic conditions (ATSDR, 1994b). Under anaerobic conditions, pentachlorophenol undergoes reductive dechlorination to tri and tetrachlorphenols and the transformation of rings

to carbon dioxide and methane (ATSDR, 1994b; Chaudhry, 1994). In freshwater sediments, reductive dechlorination byproducts include tetrachlorophenol, trichlorophenol, dichlorophenol, 3-chlorophenol, and phenol, which, under conditions at an activated sludge treatment facility, are transformed to hydrochloric acid, carbon dioxide and water (ATSDR, 1994b).

Biodegradation of 4-nitrophenol in surface water occurs rapidly, within 3.5 days in a river. In sediments, biodegradation occurs slowly under anaerobic conditions due to high concentrations of inhibitory methanogenic microorganisms. In flooded soils, greater than 50% of 4-nitrophenol was degraded in ten days (ATSDR, 1992d).

Biodegradation is not a significant pathway for bis (2-chloroethoxy) methane (Spectrum Laboratories, 2003a).

Pesticides. Pesticides enter the environment by a variety of transport processes – direct application, drift, washing off plant surface during rainfall or irrigation, erosion, surface runoff, volatilization, adsorption to airborne particulates. The proportion of applied pesticides reaching the target pest has been found to be less than 0.3%, leaving over 99% to go elsewhere (Pimentel, 1995).

DDT/DDE/DDD. Biodegradation of DDT and its metabolites is not significant but it does occur under aerobic (dechlorination) and anaerobic conditions (reductive dechlorination) by fungi, algae, and mixed microbes. Flooding increases the chemical transformation of DDT (ATSDR, 1994c).

Endosulfan. In soil, the biodegradation half-life is approximately one to two weeks. Biotransformation of endosulfan occurs under aerobic or anaerobic conditions by fungi, bacteria, and actinomycetes. Endosulfan sulfate is the product of fungal metabolism; the diol is a product of bacterial metabolism (ATSDR, 2000a). Other biodegradation metabolites include endosulfan ether, hydroxyether, and lactone although the sulfate is the only significant metabolite (Antonious and Byers, 1997).

On plant surfaces, endosulfan is oxidized to endosulfan sulfate. Residue levels on plants typically decrease to less than 20% within one week of application. The alpha and beta isomers

(i.e., Endosulfan I/II) are not readily biodegraded (Antonious and Byers, 1997) and the endosulfan sulfate residue is typically more persistent than other metabolites (ATSDR, 2000a).

Endrin. Endrin is not significantly biodegraded in soil. Results from an experiment using a clay soil with 10 to 33% moisture and an initial concentration of 1.6 to 2 ppm, the half-life was 26 to 32 weeks. Slower degradation was observed in drier soils (ATSDR, 1996a).

Herbicides. Dichlorprop is rapidly degraded in soil by bacterial activity given its half-life of approximately 10 days. Degradation occurs more rapidly in warm, moist soils with high organic content (USDA, 2003).

Chlorinated dibenzo-p-dioxins are resistant to microbial degradation in soil (ATSDR, 1998). MCPA undergoes rapid biodegradation; its half-life in aerobic soil is reported as less than four days up to 30 days (Vink and van den Zee, 1997). In soils with less than 10% organic matter, the compound was degraded in one day; soils with organic matter greater than 10% degraded in three to nine days (EXTOXNET, 1993b). Under low oxygen conditions, the half-life is 38 days and under anaerobic conditions in sediments, only 5% was transformed over 200 days. Transformation rates are regulated by oxygen-utilizing microorganisms (Vink and van den Zee, 1997). Two bacterial species, *Pseudomonas* and *Alcaligenes* will grow on MCPA (Chaudhry 1994).

MCPP, MCPA, and other chlorophenoxy herbicides are rapidly degraded in groundwater by *Stenotrophomonas maltophila* (Mai et al., 2001); however, another study indicates MCPP degradation is slow in aquifers whether aerobic, denitrifying or methanogenic conditions exist (Johannesen and Aaman, 2003). The residence time in soil may be extended with unfavorable environmental conditions; however, rapid mineralization occurs under aerobic conditions (Johannesen and Aamand, 2003). A transformation rate of 0.173/day was reported in an aerobic, undisturbed soil column; however, under anaerobic conditions, the transformation rate was reduced to 0.017/day (Vink and van der Zee, 1997). Bacteria such as *Sphingomonas herbicidovorans* and *Alcaligenes denitrificans* biodegrade MCPP as a sole carbon source along with other energy sources for growth (Vink and van der Zee, 1997; Zipper et al., 1998). *S. herbicidovorans* demonstrates distinct uptake systems for chiral phenoxyproprionic acid herbicides such as MCPP and Dichlorprop that are facilitated by diffusion and active transport

(Zipper et al., 1998). Aging has no effect on the mineralization of MCPP (Johannesen and Aamand, 2003).

PCBs. Biodegradation of PCBs is considered a major degradation pathway. Numerous bacteria and some fungi can degrade PCBs under both aerobic and anaerobic conditions. Biodegradation is highly variable and dependent on many factors such as previous exposure to PCBs or PCB-like compounds, bioavailability, initial concentrations, moisture, temperature, available nutrients and the presence of inhibitory compounds. Biodegradation is dependent on level of chlorination; it is predominant in the mono- through tetrachlorobiphenyls homologs. The penta-, hexa-, and hepta-chlorinated biphenyls are resistant to degradation unless enrichment is used (ATSDR, 2000b).

Dioxins/Furans. TCDD undergoes biodegradation but at a slow rate – the half-life ranges from 18 months to 100 years (Hrudey et al., 1996). In a study completed after eight years of aerial spraying of 2,4,5-T at Eglin Air Force Base in Florida where approximately 2.8 kg of TCDD was applied, no indications of adverse ecological impacts were observed from contaminating dioxins contained within 2,4,5-T. Much of the TCDD was photodegraded such that less than one percent was left in the soil and approximately 5% was estimated to be lost annually due to volatilization. Although Eglin AFB receives an annual rainfall of approximately 150 cm, TCDD did not leach into the sandy soil as it is strongly adsorbed. The biodegradation half-life was estimated at 10 to 12 years. No animal deaths were recorded (Young, 1983).

Metals. Metals do not biodegrade but may be biotransformed. Mercury is altered into a highly toxic form, methyl mercury, under acidic conditions (Eisler, 2000).

D4.2 WATER

SVOCs. Dinitro-o-cresols are slowly biodegraded by several pure cultures including *Corynebacterium simplex*, *Rhizobium leguminosarum*, *Veillonella alkalescens* and *Pseudomonas* spp although concentrations of 7500 mg/L were toxic to *C. simplex* (ATSDR, 1995b).

PCBs. Biodegradation of PCBs occurs through aerobic and anaerobic processes although, in sediments it is primarily through aerobic processes and primarily for the less chlorinated congeners. This is because highly chlorinated PCBs tend to sorb strongly to sediments and they are persistent with half-lives of months to years. Numerous bacterial and fungi species degrade mono- to tetrachlorinated biphenyls and biodegradation of congeners up to hexa and heptachlorobiphenyls will occur with enrichment. Metabolites of PCB degradation are chlorinated benzoic acids that degrade to chlorobenzoate that further degrades to carbon dioxide and inorganic chlorides (ATSDR, 2002b).

Biodegradation of PCB mixtures (such as Aroclors) occurs by fractionation where the less chlorinated congeners are degraded first, leaving the higher chlorinated congeners (ATSDR, 2002).

Aerobic degradation rates of PCBs are variable, based on various factors. Structural characteristics affect biodegradation - *ortho*-chlorinated congeners are more resistant than chlorines in the *meta* and *para* positions. Other factors include whether the microorganism has had previous exposure to PCB/PCB-like compounds, bioavailability, initial concentration, moisture, temperature available nutrients (carbon sources) and the presence of inhibitory compounds such as the PCB-degradation metabolites of mono- and dichlorobenzoates. These chlorinated benzoates may act as inhibitors for the further degradation of higher chlorinated PCBs (ATSDR, 2000b).

Under anaerobic conditions, slow, reductive dechlorination forms mono- and dichlorobiphenyls that can be aerobically degraded. Anaerobic degradation will decrease the concentrations of the more highly chlorinated congeners with a corresponding increase in less chlorinated congeners. Reductive dechlorination occurs in freshwater (lakes, ponds, rivers) and is dependent on the environmental factors that control aerobic degradation as well as electron acceptor availability, presence of co-contaminants, oxygen tension, redox levels, salinity, and trace metals (ATSDR, 2000b).

The optimum concentration range for biodegradation of PCBs is between 100 and 1000 ppm. Dechlorination rates at concentrations les than 50 ppm are negligible. Reductive dechlorination occurs under methanogenic, sulfidogenic, denitrifying and iron (III)-reducing conditions;

however, the fastest reduction occurs under methanogenic conditions. The extent and type of dechlorination varies from site to site. The congeners remaining from anaerobic degradation may be resistant to aerobic degradation (ATSDR, 2000b).

Dioxins/Furans. Biodegradation of dioxins in slow in water. The half-life of 1,2,3,4,7,8-HxCDD in the Hudson River was two year but the 1,2,4,6,8,9- and 1,2,4,6,7,8-HxCDD congeners were not degraded (ATSDR, 1998).

Appendix III-E

Ecotoxicology

This appendix summarizes the bioavailability of COPECs found at the Sauget Site 2 and their potential for bioaccumulation and biomagnification and discusses potential adverse effects.

Bioavailability is an important concept in risk assessments because toxicological effects are not elicited merely from the presence of a chemical. A receptor must be exposed such that the toxicant must first enter an organism through an exposure route (inhalation, ingestion or dermal contact) before interacting with cells. In other words, the chemical must be bioavailable. Bioavailability is defined as that portion of the exposure concentration that actually reaches the systemic (arterial) circulation for distribution through the organism and/or to the target organ. A chemical's bioavailability is affected by physical, chemical, and biological factors such as physical adsorption (*e.g.,* K_{oc}), lipid (fat) solubility and chemical adsorption, among others (Hamelink, *et al.*, 1994). Bioavailability determines if a chemical will bioaccumulate and/or biomagnify.

Bioaccumulation is defined as the net accumulation of a substance in living organisms from all routes of exposure. Biomagnification is the tendency of a chemical to accumulate to higher concentrations at higher trophic levels through dietary accumulation (Suter, 1993).

E1. EFFECTS ON TERRESTRIAL RECEPTORS

This section describes bioavailability of Sauget Site 2 COPECs and their potential for bioaccumulation, biomagnification in soil and possible adverse effects on terrestrial receptors.

SVOCs. Bis (2-chloroethoxy)methane is not expected to be taken up be plant roots or foliage; however, it may translocate through plants and be taken up by animals (Zeiger, 1998). No information was found on bioavailability, bioaccumulation or ecotoxicology for dibenzofuran.

Hexachlorobenzene can bioconcentrate in animals. A BCF of 0.54 was reported for two oligochaete worms; however, hexachlorobenzene is not detected in all trophic levels. Concentrations were not detected in soils or plant tissue or mammals but were found in earthworms and birds. Higher concentrations were observed in plants with higher lipid concentrations. Gaseous hexachlorobenzene diffuses into the plant directly or the evaporated compound is taken up by plant foliage (ATSDR, 1996b).

Bioavailability of N-nitroso-di-n-propylamine in laboratory rodents was between 25 and 70% through ingestion (ATSDR, 1989). No information was found on ecotoxicology of N-nitroso-di-n-propyalmine for terrestrial receptors.

PAHs. Some terrestrial plants can uptake PAHs from soil via roots or from air via the foliage through deposition, adsorption and translocation over the cuticula, uptake of the vapors through the stomata, and uptake and transport through oil cells (*e.g.,* carrots, cress) (Polder *et al.*, 1995). Atmospheric deposition greatly exceeds root uptake from soil and PAH concentrations on roots are primarily due to adsorption to root surfaces. Studies done in carrots for determination of PAH bioaccumulation in the human food chain indicate that there is no evidence of increased PAHs concentrations in carrot roots. Low molecular weight PAHs were detected in the peel; however, these compounds were there as a result of simple adsorption and there was no evidence of transfer from the peel to the core (Wild and Jones, 1992). The waxy surface of some plant leaves and fruits can concentration PAHs through surface adsorption (Irwin *et al.*, 1997).

Uptake rates are dependent on a variety of factors such as PAH concentration, solubility, PAH molecular weight, soil type, and plant species (ATSDR, 1995b; Eisler, 2000). Low molecular weight PAHs are taken up faster than higher molecular weight PAHs, such as chrysene (Eisler, 2000). In plants, PAH bioaccumulation is less prevalent than metal bioaccumulation due to the tendency for PAHs to sorb and sequester in soil, precluding bioavailability (Hillegass *et al.*, 2001). This is demonstrated by low bioaccumulation indices[1] for total PAHs (0.001 to 0.18) and individual PAHs such as benzo(a)pyrene (0.002 to 0.33). PAHs have a low potential for biomagnification in plants as well (Eisler, 2000).

Plant uptake of PAHs is by active and passive transport through the roots and possibly through the transpiration stream (Polder *et al.*, 1995). PAHs are rapidly absorbed/adsorbed by the roots but little translocation occurs to the upper plant parts.

Concentrations of benzo(b)fluoranthene were detected in the leaves of higher plants with greater concentrations in older leaves than in younger ones (Irwin *et al.*, 1997), as shown below.

[1] The bioaccumulation index is the ration of the concentration in the plant to the concentration in the soil (Pendias and Pendias, 1992).

(μg/kg)	Green leaves (summer)	Yellow leaves (fall)
Beech	62	274
Oak	62	292
Tobacco	32	126

PAH-induced phytotoxic effects are rare. Some plants contain ellagic acid, which destroys the diol epoxide form of benzo(a)pyrene, effectively inactivating its carcinogenic and mutagenic potential. Higher plants have been shown to catabolize benzo(a)pyrene (Eisler, 2000). Certain PAHs (benzo(a)pyrene, benzo(a)anthracene, ideno(1,2,3-cd)pyrene, benzo(b)fluoranthene, fluoranthene, benzo(ghi)pyrene) have growth-promoting effects on plants (Eisler, 2000; Graf and Novak, 1968).

In animals, bioaccumulation usually occurs with low molecular weight PAHs (*i.e.*, two and three rings, such as naphthalene) whereas higher molecular weight PAHs (*i.e.*, four through six rings, such as benzo(a)pyrene, benzo(b)fluoranthene, chrysene) undergo metabolism (Beyer *et al.*, 1996).

A study was conducted using creosote coal tar distillates to determine bioaccumulation in a laboratory ecosystem involving soil, insects, snails, earthworms and voles (*Microtus canicaudus*). The voles had levels of phenanthrene and acenaphthene at concentrations 12 to 31 times greater than the soil; however, these PAHs were found as bound residues in the GI tract, not accumulated in body tissues (ATSDR, 1995b).

In worms, there is a close relationship between the concentration found in the worm and the concentration in soil indicating that accumulation is due to simple partitioning. If the BSAF is less than one, such as in the case of fluoranthene, phenanthrene, and anthracene, uptake will decrease with increasing PAH soil concentrations. BSAFs for PAHs in this study are between 0.13 and 0.2; fluoranthene is 0.41, phenanthrene is 0.33 and anthracene is 0.26 (Krauss *et al.*, 2000).

Despite their high lipid solubility, vertebrates have the ability to metabolize PAHs using a mixed function oxidase (MFO) enzyme system, which transforms insoluble molecules to water soluble structures (Beyer *et al.*, 1996). Elimination rates are faster in vertebrates than invertebrates

(Hendriks *et al.*, 2001) in part, due to the presence of the MFO system in only select invertebrates and because vertebrate metabolism is faster than invertebrate metabolism (Beyer, *et al.*, 1996). The ability of vertebrates to metabolize PAHs minimizes the possibility of bioconcentration or biomagnification (Edwards, 1986).

The ability of vertebrates to metabolize rather than bioaccumulate PAHs is demonstrated by a study completed to correlate PAH concentrations in diet and in resulting carcasses for tree swallows and house wrens (insectivorous species that are likely to be at the Site). It was determined that PAH concentrations in the diets of the tree swallow and the house wren were 28 and 38 times greater, respectively in the diet than in carcasses due to rapid metabolism (Custer *et al.*, 2001).

Chrysene. The oral absorption of CHR is high in rats with high dose; however, 64 to 87% is excreted with the feces. At a concentration of 22 mg/kg in corn oil, rats excreted nearly 75% of the CHR. CHR is rapidly and widely distributed in rats in the liver, blood, and brain (ATSDR, 1995). Bioavailability of CHR in rats ranged from 41 to 53% through inhalation and 60 to 87% through ingestion (Hrudey et al., 1996).

Pentachlorophenol. Pentachlorophenol is readily bioavailable when ingested, regardless of species (i.e., monkey, rat, mouse), vehicle (corn oil, diet, water) or different doses (Hrudey et al., 1996). Oral bioavailability was reported between four and 34% in rodents (ATSDR, 1994b) and 65 to 100% for rodents and the monkey (Hrudey et al., 1996) . Elimination is rapid an biphasic in rats as well as sex dependent. When pentachlorophenol-contaminated soil is applied to monkey skin, approximately 30% is bioavailable (ATDSR, 1994b); other species have similar results (Hrudey et al., 1996).

Bioaccumulation of pentachlorophenol is dependent on pH. Observed bioaccumulation factors in earthworms ranged between 3.4 and 13. It is not biomagnified in terrestrial or aquatic food chains (ATSDR, 1994b).

PESTICIDES

Endosulfan. Endosulfan does not bioaccumulate in terrestrial or aquatic ecosystems or bioconcentrate in fatty tissues or milk. Endosulfan and its metabolites are translocated in plants from leaves to roots (ATSDR, 2000a).

In animals, 80% of the oral dose is absorbed and metabolized to polar and non-polar metabolites that are excreted in the feces. When applied dermally, 20% of the dose is absorbed (ATSDR, 2000a).

Endrin. Plants may have significant uptake of endrin and/or transformation products (ATSDR, 1996a). In animals, endrin is well absorbed through ingestion and is distributed to the fat and skin then excreted in urine and feces. Dermal exposure to rats and rabbits resulted in death and toxicity; however, no doses were provided (ATSDR, 1996a).

Heptachlor/Heptachlor epoxide. Due to its persistent characteristics and lipophilicity, heptachlor epoxide is a significant biomagnifier in the terrestrial food chain. When ingested by rats, approximately 72% of heptachlor epoxide is absorbed from the gastrointestinal (GI) tract and eliminated via bile into the feces. It is also absorbed through the skin. The highest concentrations of heptachlor epoxide in whole fish samples are located in Hawaii and in the Midwest, especially in Lake Michigan and the Mississippi, Missouri, Ohio, and Illinois Rivers (ATSDR, 1993c).

Lindane (gamma-BHC). Experimental data indicates that worms (*Eisenia fetida*) have a high metabolic rate of Lindane with a maximum body burden that is 25 to 30 times greater than of their food source (alder leaves). However, the percent organic matter does not appear to be a factor as there is no difference in the body burden between soils with 3% or 10% organic matter. In times of drought, isopods have adapted to avoid water losses that reduce contact with surrounding medium thereby decreasing exposure (Sousa et al., 2000).

HERBICIDES

Dichlorprop. No information was found on bioavailability, bioconcentration or ecotoxicology of Dichlorprop.

Dinoseb. Dinoseb does not bioaccumulate in plants or animals. Dinoseb interferes with the cell's ability to absorb food and disturbs production of ATP. Plants are affected by direct contact as it does not translocate within the plant. Breakdown products of Dinoseb have been detected with fruitier skin and flesh (EXTOXNET, 1993a). Dinoseb is rapidly taken up by fish but depurated easily thus, bioaccumulation is not significant (EXTOXNET, 1993a).

It is a reproductive toxin in rabbits at doses between 1 and 22 mg/kg-day and teratogenic effects were observed in rats, mice, and rabbits at doses of 7.5 to 33 mg/kg-day. Reduced growth rates and weight loss were noted with chronic exposure (200+ days) at a dose of one mg/kg-day. No tumors were noted at doses of one, three, or ten mg/kg-day (CalEPA, 1997). Adverse effects have been reported in rats and mice at a dose of 10 mg/kg-day (Pesticide Information Profile, 1993b).

MCPA. MCPA is absorbed and translocated in most plants where it interferes with protein synthesis, cell division, and ultimately the growth of non-resistant plants (Vink and van der Zee, 1997).

MCPA is rapidly absorbed and eliminated from mammalian systems (Vink and van der Zee, 1997); approximately 75% of the dose is gone within two days in rats (EXTOXNET, 1993c). The chronic lowest effects level (LEL) in a dog was 0.75 mg/kg-day; the subchronic (90-day) LEL was 3 mg/kg-day and the no observed effects level (NOEL) was 1 mg/kg-day. At concentrations greater than 0.75 mg/kg in dogs, blood chemistry and organ weight changes and histopathological changes were observed (USEPA, 2003a).

Toxicity tests completed on MCPA using amphibian embryos indicated low toxicity based on an LC50 of 3600 mg/L (Bernardini et al., 1996).

MCPP. MCPP (Mecoprop) causes kidney damage in rats at concentrations between 9 and 27 mg/kg-day and it is teratogenic in rats at concentrations of 125 mg/kg-day but not in rabbits (EXTOXNET, 1993c). Estimated doses for onsite short-tailed shrews are between 3 to 6 mg/kg-day.

MCPP is not toxic to birds. LC50 values for mallard ducks and bobwhite quail are 5620 ppm and 5000 ppm, respectively. Oral LD50 concentrations for Japanese quail and bobwhite quail were 740 mg/kg and 700 mg/kg, respectively (EXTOXNET, 1993c).

PCBs. Factors that affect the uptake and accumulation of PCBs into biota include K_{oc}, and lipid content. Less chlorinated PCBs (1 to 4 chlorines) are readily take up but they are also readily metabolized and excreted (ATSDR, 2000b).

Oral and dermal bioavailability of PCBs in animals decreases with increasing chlorination and correlates strongly with log K_{ow}. Approximately 6-8% of PCB 77 is bioavailable and 5-8% of PCB 153 (ATSDR, 2000b).

PCB accumulation in plants may occur through wet/dry deposition on aerial parts or through root uptake. The primary uptake mechanism is vapor-to-plant transfer, especially for trichlorinated homologs. Aerial dry deposition is the most important transfer pathway for hepta- and octachlorinated homologs. Strong adsorption to organic matter and clays inhibit PCB uptake through plant roots. Below ground vegetation accumulates lower PCB concentrations and predominantly accumulates moderately chlorinated congeners (i.e., PCB 99, 101, 110) directly from soil (ATSDR, 2000b).

In general, plant BCFs for PCBs are less than 0.02. However, higher uptake can occur in certain root crops as PCBs partition into the lipid-rich epidermal layer or by soil particles adhering to the root. In carrots grown in acid brown sands with Aroclor 1254 concentrations of 0.05, 0.5, and 5 ppm, the BCF was calculated at 0.16. At 100 ppm in the top six inches of soil, the BCF was still 0.16 in the roots (ATSDR, 2000b).

PCBs concentrate primarily in adipose tissue. Bioaccumulation is dependent on the compounds stereochemistry with optimal bioaccumulation occurring from planar molecules with fiver or

seven chlorines. PCBs with log K_{ow}s greater than 5 are not readily bioaccumulated from soil and sediments directly but from food web transfer (ATSDR, 2000b).

Biomagnification in piscivorous birds is congener specific and more predominant for congeners with K_{ow}s between five and seven (ATSDR, 2000b).
PCBs can be transferred across the placental barrier and enter the fetus (ATSDR, 2000b). Excretion of PCBs into eggs is inversely related to chlorination. In adult ring-necked pheasants (*Phasianus colchicus*), approximately 2 to 3.8% of the total PCB mass in the adult hens was excreted into the eggs, chickens excreted approximately 0.4 to 1.2%, and approximately 8% was excreted from adult herring gulls (*Larus argentatus*) and nearly 25% for arctic terns (*Sterna pardisaea*) to their eggs. Adult PCB concentrations were approximately two to seven times greater than egg concentrations (Bargar et al., 2001).

Eastern bluebirds (*Sialia sialis*) and tree swallows (*Iridoprocne bicolor*) nesting in apple orchards from the Great Lakes Basin that sprayed with pesticides from 1988 through 1994 were analyzed for organochlorine residues. All organochlorine residues were low, less than 0.23 μg/g (WW), except DDE. Total PCB concentrations in tree swallows ranged from 0.27 to 0.71 μg/g and from 0.07 to 0.87 μg/g in bluebirds. Based on the concentrations of these pesticides, egg survival was affected and declined 14% (Bishop et al., 2000).

In ospreys, a NOAEL of 136 ng/kg TEQ for osprey embryo survival was reported (Woodford et al., 1998) and a NOAEL of 210 ng/kg in bald eagles (Elliott et al., 1996).

DIOXINS/FURANS. In plants, TCDD has been demonstrated to be deposited, taken up in roots, undergo air-to-leaf transfer and bioaccumulate in tissue and eggs in foraging animals (Hrudey et al., 1996).

Bioavailability in rats was demonstrated at 50 to 85%, depending on the vehicle carrier; soot, fly ash and soil extracts with corn oil yielded lower absorption. In rabbits, bioavailability from contaminated soil was 29 to44%. Bioavailability to rats from soil containing one μg/kg was approximately 25% and 50% with soil containing 5 μg/kg TCDD (Hrudey et al., 1996).

Rats had 18% oral absorption of TCDD as dissolved soil. The dermal absorption is highly dependent on the formulation but in soil, ranged between 20 and 40%. TCDD in soil reduced the dermal uptake (Hrudey et al., 1996; Young, 1983).

Unspecified low doses in animals cause adverse effects on immune functions, reproductive development, behavior and metabolism of glucose and lipids. TCDD has been shown to be a tumor promoter for liver and skin cancer (Hrudey et al., 1996).

In a study completed after eight years of aerial spraying of 2,4,5-T at Eglin Air Force Base in Florida where approximately 2.8 kg of TCDD was applied, no indications of adverse ecological impacts were observed from contaminating dioxins contained within 2,4,5-T. Much of the TCDD was photodegraded such that less than one percent was left in the soil and approximately 5% was estimated to be lost annually due to volatilization. Although Eglin AFB receives an annual rainfall of approximately 150 cm, TCDD did not leach into the sandy soil as it is strongly adsorbed. The biodegradation half-life was estimated at 10 to 12 years. No animal deaths were recorded (Young, 1983).

A NOAEL of 37 ng/kg TEQ and a LOAEL of 130 ng/kg TEQ were reported for dioxins and PCBs for CYP1A indication in osprey chicks (Elliot et al, 2001).

Dioxins will bioaccumulate in aquatic organisms, based on K_{ow} values ranging from 10^4 to 10^{12}. Bioconcentration increases with increasing chlorination up to the TCDD then decrease with chlorinated up to OCDD. Greater chlorination than OCDD lessens the bioconcentration potential because the large molecule cannot transport across biological membranes (ATSDR, 1998).

METALS. In general, there is less transport of metals to plant root surfaces in cooler, humid climates than in hotter, drier climates. In terrestrial plants, metals' bioavailability is decreased as the diffusion layers are much thicker (approximately 10 to 100 μm) than in aquatic plants. The distance may actually be greater than 100 μm due to tortuosity in the apoplast[2]. In addition to plant-based diffusional limitations, the soil itself exerts strong diffusional limitations to metal

[2] The apoplast consists of cell walls and intracellular spaces and provides the plant with another mechanism, besides osmosis, to bring water into the cell.

transport in the roots due to strong metals' soil adsorption and pore space tortuosity (Allen, 2002).

Aluminum. Aluminum is naturally occurring, beneficial nutrient found in many plants at concentrations of ten to hundreds of mg/kg (Pendias and Pendias, 1992). Aluminum in edible plants and foods (eggs, apples, cabbage, corn) has been measured at concentrations between 0.0 to 7.16 mg/kg (ATSDR, 1999). Plant species and cultivars of the same species differ considerably in their ability to take up and translocated aluminum to above ground parts ; accumulation is dependent on soil and plant factors (ATSDR, 1999; Pendias and Pendias, 1992). In leafy vegetables, the uptake factors range between approximately 0.004 and 0.00065 in fruits. These factors indicate that aluminum is not taken up in plants from soil but is biodiluted (ATSDR, 1999). Some plants are capable of hyperaccumulation, with concentrations greater than 0.1% (ATSDR, 1999; Pendias and Pendias, 1992).

Aluminum toxicity impairs nutrient uptake and transport by causing an imbalanced ration of cations to anions occurring first in the roots and then translocated to above ground portions. Aluminum interferes with cell division and properties of the protoplasm and cell wall by forming organic complexes within the cell and precipitating out with nucleic acids. Excess aluminum in plants is accompanied by increased calcium and magnesium in the plants (Pendias and Pendias, 1992).

Oral bioavailability of aluminum is dependent on its form. In rabbits, the citrate, lactate, nitrate, or chloride form is between 0.57 to 2.18% whereas bioavailability of insoluble aluminum (borate, hydroxide, glycinate, sucrose, sulfate) ranged from 0.27 to 0.6%. Bioavailability is also dependent on if the stomach is empty or full, less bioavailability with a full stomach (ATSDR, 1999).

Aluminum toxicity affects the brain, with preferentially accumulation in the hippocampus. There is limited evidence in rabbits, and mice that aluminum crosses the placenta (ATSDR, 1999).

Antimony. Antimony is not an essential metal for plants; however, it is easily taken up by plants in soluble forms as indicated by average concentrations of 0.06 ppm (DW) in terrestrial plants, 0.029 ppm (DW) in grasses, and 0.0002 to 0.0042 mg/kg fresh weight (FW) in edible

plants. However, antimony concentrations found in plants from soil at a smelter site was the result of surface deposition, actual uptake was minor (Pendias and Pendias, 1992).

Speciation is important in the bioavailability of antimony (ATSDR, 1992a). Antimony does not readily bioaccumulate in soil; its bioaccumulation index is 0.01 compared to an index of five for cadmium and three to four for selenium (Pendias and Pendias, 1992).

Phytotoxicity has not been widely reported in plants, toxicity would occur because it competes with essential metabolites (Pendias and Pendias, 1992).

Antimony bioconcentration has been measured in invertebrates, shrews, rabbits, and voles; however, it does not biomagnify from lower to high trophic levels (ATSDR, 1992a). In rats, it was demonstrated that antimony does not accumulate appreciably as it is slowly absorbed in the GI tract of rodents and excreted in the urine or the feces, depending on its speciation [National Research Council (NRC), 1980]. In a study where rats were fed up to 100 mg/kg-day for six months, only one milligram of antimony was found in the carcasses, regardless of the daily dose (USEPA, 1988a). Rabbits were able to tolerate concentrations of 70 to 150 parts per million (ppm) in their diet (NRC, 1980).

Arsenic. Arsenic is an essential nutrient, used in algae and fungi for the metabolism of carbohydrates (Pendias and Pendias, 1992). Background concentrations in terrestrial flora and fauna, birds and freshwater biota are usually less than one mg/kg (FW).

Arsenic bioavailability is greatest in coarse-textured soil with little colloidal material and little ion exchange capacity; however, the arsenic must be in a soluble form (Eisler, 2000). Flooded soils, such as those that occur at the Sauget Site 2, limit the arsenic bioavailability (Pendias and Pendias, 1992).

In plants, arsenic becomes less toxic when it is methylated to monomethylarsonic and dimethylarsinic acids or converted to arseno-sugars, arsenobetaine or phospholipids (Newman, 2001). Soil microorganisms are capable of tolerating and metabolizing relatively high concentration of arsenic, up to 1600 mg/kg (Eisler, 2000). Bacteria accelerate the oxidation of

arsenites and alkylation processes - biomethylation is conducted aerobically by yeast and anaerobically by methanogenic bacteria (Pendias and Pendias, 1992).

Because arsenic is strongly adsorbed to soil colloids, it may be absorbed by plants roots; however, it will not be translocated to above ground tissues (Allen, 2002). Arsenic concentrations in plants from uncontaminated areas ranged from 0.009 to 1.5 mg/kg (DW). Some plants can accumulate amount of arsenic up to 6000 mg/kg (DW), including mushrooms (Pendias and Pendias, 1992).

In plants, arsenic toxicity occurs because it competes with essential metabolites. Symptoms of phytotoxicity include leaf wilting, increased anthocyanin levels (violet coloration), root discoloration, cell plasmolysis, and growth reduction (Pendias and Pendias, 1992). Phytotoxic actions of inorganic and organic forms of arsenic are different (Eisler, 2000).

Soil concentrations of 150 mg/kg to 165 mg/kg are usually devoid of earthworms (Eisler, 2000). However, arsenic does not appear to bioaccumulate in terrestrial mammals. Arsenic concentrations in small mammals (field mouse, bank vole, field vole, common shrew) near an arsenic refinery were less than one mg/kg fresh weight (FW), which did not reflect levels in the surrounding soil and vegetation.

Most mammals rapidly excrete ingested arsenic in the urine with a half-life averaging six days. Studies from the scientific literature suggest that small mammals[3] may exhibit avoidance behavior with arsenic-supplemented food. However, if arsenic is distributed in the body, tissues with high lipid content will contain greater concentrations (Eisler, 2000).

Arsenic concentrations in birds in excess of 120 mg/kg are considered poisonous; concentrations of 2 mg/kg to 10 mg/mg are considered elevated (Eisler, 2000).

Barium. Barium is not an essential component of plant tissue; however, is found at concentrations ranging from 1 to 198 ppm (DW). The highest ranges are found in the leaves of

[3] Care should be taken when choosing arsenic toxicity benchmarks from rats (NOAEL used for this ERA is from a mouse) because arsenic metabolism in rats is unique. It is stored in the hemoglobin and excreted very slowly with a half-life between 60 and 90 days (Eisler, 2000).

cereal and legumes; the lowest in grains and fruits. High concentrations (greater than 10,000 ppm) are found in different trees, shrubs, and Brazil nuts (Pendias and Pendias, 1992). Approximately one to two percent dry weight of barium is considered toxic to plants; however, the toxicity is reduced with the addition of calcium, magnesium, or sulfur salts (Pendias and Pendias, 1992).

Barium does not significantly bioaccumulate or biomagnify in biological organisms (ATSDR, 1992b; Newman, 2001).

Cadmium. Cadmium is naturally occurring element in soil, plants, and animals with documented concentrations of 0.3 mg/kg in terrestrial plants (legumes, grasses) and animals and 3.5 mg/kg in freshwater biota. Willows (*Salicaceae*) and mushrooms have naturally high concentrations of cadmium (Eisler, 2000; Pendias and Pendias, 1992). However, cadmium is not an essential element in plants (Pendias and Pendias, 1992). Greater soil bioavailability and root uptake has been observed for cadmium compared to most other heavy metals, especially in acidic soils (Hrudey et al., 1996; Pendias and Pendias, 1992; Torres and Johnson, 2001).

Cadmium concentrations in plants are not usually phytotoxic (Allen, 2002). However, symptoms of phytotoxicity include growth retardation, root damage, chlorosis, and red-brown coloration of the leaf margin or veins. It also affects photosynthesis, disturbs transpiration and carbon dioxide fixation and cell membrane permeability. Cadmium has a strong affinity for sulfhydryl groups (Pendias and Pendias, 1992).

In earthworms, acidic conditions increase the potential for cadmium bioaccumulation. The main detoxification pathway for cadmium in a number of earthworm species is the sequestration within inorganic matrices or binding to organic ligands (Allen, 2002).

Cadmium has a prolonged biological half-life and may have the potential for biomagnification due to its binding with metallothionein (Beyer *et al.*, 1996).

In Japanese quail, cadmium uptake was dose dependent but only 0.4% to 2% was absorbed as much of ingested cadmium was bound to the intestinal epithelium. Dietary supplements greater than two mg/kg induce metallothionein and other effects. In birds, most of the cadmium is

stored in the feathers which is why molting is an important depuration process (Eisler, 2000). Cadmium bioaccumulation increases in the following sequence: terrestrial carnivores, passerines, waders, and then seabirds (Beyer *et al.*, 1996).

In small rodents, such as rats and mice, the oral bioavailability of cadmium ranges from 0.2 to 0.8%; however, bioavailability is affected by various factors such as age, gender, pregnancy and dietary factors. Dermal bioavailability is guinea pigs, rabbits, and mice ranged from 0.1 to 0.6% (Hrudey et al., 1996).

In birds, cadmium can accumulate in tissues such as (in decreasing order) the kidney, liver, brain, bone, and muscles. In terrestrial animals, cadmium accumulates with age in the kidneys and livers of moles, shrews, deer, and caribou. Cadmium accumulates with age; the greatest concentrations are found in older animals (Eisler, 2000).

Cadmium toxicity is dependent on various nutritional factors for both animals and plants. The addition of zinc, iron, ascorbic acid, calcium, or selenium to a diet will ameliorate the adverse effects of cadmium (Allen, 2002; Eisler, 2000; Hrudey et al., 1996). The addition of lead or mercury will exacerbate cadmium toxicity. Birds are relatively resistant to the biocidal properties of cadmium due to the presence of metallothioneins; ducks have the greatest levels of metallothionein. However, cadmium has been detected in rodents at concentrations up to 20 mg/kg bw without adverse effects (Eisler, 2000).

Chromium. Chromium is not taken up to any great extent by plants due to its low solubility and strong adsorption to soils (Allen, 2002) but, in higher plants, chromium is beneficial but not essential (Eisler, 2000; Pendias and Pendias, 1992). Several factors affect the ability of plants to uptake chromium. Under normal soil conditions, soluble hexavalent chromium is easily converted to insoluble trivalent chromium and root tissues are not capable of stimulating the reduction of trivalent chromium to the soluble divalent (Cr^{2+}) form, a key process in iron absorption in plants. Chromium concentrations in plants range from 0.02 to 0.2 ppm (DW) (Pendias and Pendias, 1992).

No adverse affects were seen in plants with concentrations up to 2140 mg/kg. Maximum tolerated doses for chromium oxides were 3000 ppm and 1000 ppm (Eisler, 2000).

Phytotoxicity in sensitive species occurs around one to two ppm which may inhibit seed germination and growth of roots and shoots (Eisler, 2000), in tobacco between 18 and 24 ppm; 10 to 100 ppm in rice; 10 ppm in barley seedlings and 4-8 ppm in corn. Symptoms of phytotoxicity in clued wilting of tops, root injury chlorotic new leaves and brownish-red leaves (Pendias and Pendias, 1992).

In animals, trivalent chromium (Cr^{3+}) is an essential element in mammals, necessary for normal carbohydrate and lipid metabolism as well as a cofactor in insulin production. Chromium deficiency exhibits a pathology similar to diabetes (NRC, 1980). The oral bioavailability of chromium to rodents (rats, mice) is less than 0.5% for trivalent chromium and 2.3 to 2.4% for hexavalent chromium. Dermal bioavailability is pH dependent where increasing pH increase dermal absorption. Dermal bioavailability from chromium adsorbed to soil is less than one percent in guinea pigs (Hrudey et al., 1992). In warm-blooded animals, chromium toxicity is mostly by the hexavalent form (Eisler, 2000).

Chromium does not biomagnify in terrestrial or aquatic food chains rather, chromium concentrations decrease with increasing trophic levels (*i.e.*, food webs with birds and mammals) (Eisler, 2000).

Cobalt. Cobalt is an essential nutrient for both blue-green algae and nitrogen-fixating microorganisms. It is unknown if cobalt is essential for higher plants. Cobalt concentrations of 10 ppb are necessary for nitrogen-fixating bacteria found in alders and legumes; however, cobalt inhibits magnesium in some microbial species (Pendias and Pendias, 1992).

Plant uptake is a function of cobalt mobility. Plants can take up cobalt by leaves through the cuticles or through the roots. Translocation of cobalt from the roots to above ground parts is not significant; the transfer coefficient is between 0.01 and 0.3 (ATSDR, 1992). Soils with less than five ppm produce cobalt deficient herbage, especially in soils with iron and manganese oxides. Cobalt is applied to soil in salt form to alleviate the deficiency (Pendias and Pendias, 1992).

Cobalt toxicity is not seen in nature. Cobalt toxicity in plants from anthropogenic sources results in white, dead margins and leaf tips and interveinal chlorosis of new leaves that is lined to iron chlorosis. Toxic levels range from 43 to 142 mg/kg in bush beans, 19 to 32 mg/kg in grass and

six mg/kg in barley seedlings. The critical levels range between 30 and 40 ppm (Pendias and Pendias 1992).

Certain species including Cruciferae, Caryophyllaceae, Violaceae, Leguminosae, Boraginaceae, Myrtaceae, and Nyssaceae can hyperaccumulate cobalt to concentrations between 2500 and 17,000 mg/kg. Normal cobalt levels in clover range between 0.1 and 0.57 mg/kg and 0.03 and 0.27 mg/kg for grass (Pendias and Pendias 1992).

Cobalt is an essential element in animals as it is a precursor of Vitamin B12 (Pendias and Pendias, 1992). It is found in liver, muscle, lung, lymph nodes, heart, skin, bone, stomach, hair, brain, pancreas, kidneys, plasma, and the bladder (ATSDR, 1992c).

In animals, absorption of cobalt is dependent on the compound type, dose, animal weight and nutritional status. In rats, approximately 30% of cobalt (as cobalt chloride) was absorbed. Iron deficiency increases cobalt absorption (ATSDR, 1992c).

Little biomagnification of cobalt has been observed in animals at higher trophic levels (ATSDR, 1992c).

Copper. Copper occurs in forms from elemental (Cu^0) to trivalent (Cu^{3+}); however, the divalent form (Cu^{2+}) is the biological significant species. It is an essential element for normal growth and development of plants. It rarely accumulates in organisms to high levels (Hrudey et al., 1996).

The uptake of copper in earthworms from soil is not influence by pH (Allen, 2002) but chelation and complexation are the key reactions that govern copper in most soils. Around 80% of the soluble copper in soil is complexed with organic substances (Pendias and Pendias, 1992). The metal-chelate complex in copper is important in determining plant uptake. The bioavailability of the soluble copper form depends on the molecular weight of the copper complexes and the amounts present (Pendias and Pendias, 1992). Uncharged metal complexes exhibit lipophilicity and are transported across biological membranes. Due to complexation, total copper concentrations in soil solution are not well correlated to copper concentrations in plants (Allen, 2002).

Complexed copper dissociates after entering the plant root; however, plant roots have the ability to hold copper against transport to the shoots under both copper deficiency and copper excess conditions. Thus, copper has a low mobility relative to other elements in plants. Once in the cell wall of roots, it becomes essentially immobile (Pendias and Pendias, 1992).

Copper is an essential element in plants involved in biochemical functions of photosynthesis, respiration, carbohydrate distribution, nitrogen reduction/fixation, protein metabolism and cell well metabolism, influences the water permeability of the xylem vessels, controls the production of DNA and RNA, and increases disease resistance, especially to fungi. A deficiency of copper greatly inhibits plant reproduction by decreasing seed production and causing sterility in pollen. Copper levels in plants less than two mg/kg are considered inadequate (Pendias and Pendias, 1992).

Some organisms are copper hyperaccumulators. *Penicillium* sp. can accumulate copper to concentrations of 20,000 ppm from solutions containing 100 ppm. Conversely, micromycetes have develop a resistance to copper in contaminated soils (Pendias and Pendias, 1992).

Copper interacts with other metals. For example, copper and zinc competitively inhibit root absorption of each other; copper and iron are antagonistic and cause chlorotic conditions. Copper interferes with the role of molybdenum in the enzymatic reduction of nitrate (Pendias and Pendias, 1992).

Copper toxicity symptoms in plants include chlorosis and root malformation and occur at concentration between 15 and 20 ppm in the most sensitive species (Pendias and Pendias, 1992).

Plant tissue is also a major source of copper to animals (Pendias and Pendias, 1992). Spiders, oribitatide mites, centipedes, fly larvae, and beetles can accumulate copper greater than earthworms or enchytraeid worm (Allen, 2002). No evidence has been found of bioaccumulation in earthworms or mammals (ATSDR, 1990a).

Lead. Lead is a ubiquitous element found in plants, animals, soil, and water. Lead essentiality in plants is controversial; however, concentration between two and six ppb seem to be

necessary. Some stimulating effects in plant growth have been observed using lead salts [$Pb((NO)_3)_2$] (Pendias and Pendias, 1992).

Lead in edible portion of plants from uncontaminated areas is approximately 0.05 to 3 ppm (DW). Average lead concentrations in grasses were 2.1 ppm and 2.5 ppm in clovers (Pendias and Pendias, 1992).

Lead accumulation in roots may be overestimated since much of the measured lead is bound tightly on surface deposit and is not bioavailable therefore, a substantial amount must accumulate in soil before it affects the growth of higher plants (Eisler, 2000). (Allen, 2002; Hrudey et al., 1996; Torres and Johnson, 2001). However, certain soil and plant factors, such as low phosphorous, acidic soils and organic ligands, are known to facilitate lead uptake by roots and translocation into plants (Allen, 2002; Eisler, 2000; Newman, 2001; Pendias and Pendias, 1992). However, lead is not translocated readily to above ground tissues due to low solubility (Allen, 2002). In soluble forms (including tetra-alkyl lead) in nutrient solutions within the laboratory, plant roots take up great amounts of lead; however, in soil, only 0.003 to 0.005% is taken up but only 3% of that is translocated (Pendias and Pendias, 1992). Therefore, lead does not usually biomagnify in the terrestrial food chain (Allen, 2002; Eisler, 2000; Newman, 2001).

Lead concentrations between 100 and 500 ppm are considered toxic to plants and cause changes in cell membrane permeability and reactions of thiol groups with cations (Pendias and Pendias, 1992). It also inhibits plant growth and decreases photosynthesis, mitosis and water absorption (Eisler, 2000; Pendias and Pendias, 1992). Some plant species and bacterial strains have developed a lead-tolerant mechanism (Pendias and Pendias, 1992).

In microorganisms, lead can significantly accumulate at concentrations proportional to concentrations in the soil. Lead toxicity limits enzymatic activity; thus, soil organic matter, especially cellulose is incompletely decomposed (Pendias and Pendias, 1992).

Lead uptake in soil invertebrates is dependent on their calcium turnover rates because soil calcium competitively suppresses lead uptake in earthworms. The main detoxification pathway

for lead in a number of earthworm species is the sequestration within inorganic matrices or binding to organic ligands (Allen, 2002).

In mammals, lead bioavailability is dependent on a variety of factors including age, nutritional status, dietary factors and carrier vehicles. In the environment, lead is present as a mixture of salts, soil/dust bound, or incorporated into the soil matrix; therefore, the bioavailability of lead is dependent on the solubility of these lead forms. Dermal bioavailability of lead is very slight as it forms complexes with the proteins on the skin to prevent absorption. However, some forms of lead, such as the tetra-alkyl and acetate salts, are relatively permeable. Tetraethyl lead absorbed rapidly at a rate of 6.5% through rat skin; lead acetate between 1.5 and 4.4% (Hrudey et al., 1996).

Most lead poisoning in animals, especially birds, is a result of ingesting of lead shot and sinkers or exposure to automobile exhaust. Lead is a cumulative poison concentrating in bone and hematopoietic tissues in mammals and all metabolic effects from lead are adverse (Eisler, 2000). A maximum tolerated dose has been observed at 30 ppm (NRC, 1980).

Mercury. Mercury occurs in three general forms – elemental, inorganic and organic, all of which are biologically significant. Mercury is strongly adsorbed by soil colloids that may be absorbed by plant roots but not readily translocated to above ground tissues (Allen, 2002).

Mercury may undergo biotransformation processes and oxidation reduction in both surface water and soil (Hrudey et al., 1996). Microbial methylation occurs under aerobic and anaerobic conditions. Methylated mercury is readily absorbed through cell membranes where it can be absorbed by into plant root system and translocation within the plant. Plants can also uptake mercury vapor from the atmosphere (Pendias and Pendias, 1992). Background levels of mercury are found in vegetables and fruits at concentrations between 2.6 and 86 ppb (DW). Lichens, carrots, lettuces and mushrooms are mercury accumulators (Pendias and Pendias, 1992).

Symptoms of mercury phytotoxicity cause changes in plant cell membrane permeability and interfere with metabolic process such as photosynthesis, chlorophyll manufacture, gas exchange and respiration through reactions of thiol groups with cations. Symptoms of

phytotoxicity include stunted seedling growth and root development and inhibition of photosynthesis (Pendias and Pendias, 1992).

Mercury is not an essential element and it is bioaccumulated and biomagnified in biological organisms. Uptake is modified by the age of the organism, water pH (greatest uptake occurs at pH 5), and dissolved organic matter, which decreases bioavailability (Eisler, 2000). Oral bioavailability of inorganic mercury is low in mice, approximately 2% in diet and 20 to 25% with water; however, bioavailability of methylmercury increases substantially to 95%. Dermal bioavailability is also low, approximately 2.2-5.9% in guinea pigs (Hrudey, et al., 1996).

Within biological systems, mercury is transformed into compounds with high toxicities that are mutagenic, teratogenic, and carcinogenic with embryocidal, cytochemical and histopathological effects. However, mercury toxicity in mammals is modified by the age, sex, sexual condition, and diet of the animal as well as the season and other variables. A body burden of less than 250 μg/kg for mammals and a daily dose of 32 μg/kg bw for birds have been suggested (Eisler, 2000).

Bioaccumulation in birds occurs in species that eat fish and other birds. Great blue herons collected from the Great Lakes region have body burdens of mercury between 0.7 to 4.3 (FW) mg/kg. Mercury concentrations within birds that eat larger fish are greater than those that eat smaller fish or crustacea. In raptor species such as *Falco* (falcons), *Haliaeetus* (bald eagle), *Buteo* (*e.g.,* red-tailed hawk), and *Accipiter* (*e.g.*, sharp-shinned hawk), mercury may take up to 10 years to accumulate in feathers. Molting provides an important depuration process (Eisler, 2000).

Selenium. Selenium is an essential element used by plants in the glycine reductase enzyme. In higher animals, it prevents silver necrosis and myopathies and is integral part of the glutathione peroxidase electron transport chain (NRC, 1980).

Selenium bioavailability from soil is dependent on many factors such as pH, temperature (increased bioavailability with soil temperatures greater than 20^{o}C than cooler temperatures less than 15^{o}C), rainfall (increased rainfall yields decreased selenium concentrations in plants), water regime, and oxidation reduction potential (Pendias and Pendias, 1992).

Selenium deficiency has been determined to be a greater threat to animal health than selenium toxicity (Eisler, 2000; Pendias and Pendias, 1992) and concentrations between 0.1 and 0.3 mg/kg are routinely added to animal diets (NRC, 1980). In rats, the minimum concentration necessary to prevent selenium deficiency is 54 to 84 μg/kg (FW) (Eisler, 2000). In birds, diets with concentrations of selenium less than 0.1 mg/kg are deficient. Selenium diet concentrations between 0.1 mg/kg and 1 mg/kg are nutritionally adequate and diet concentrations greater than three mg/kg are considered high (Scheuhammer *et al.*, 1998).

The margin of safety for selenium between micronutrient and toxic is narrow. Phytotoxicity of selenium has not been reported under natural conditions. In plants, selenium toxicity occurs because it competes with essential metabolites (nitrogen, phosphorus, sulfur) and several amino acids (Pendias and Pendias, 1992). Toxicity occurs at concentrations of 25 to 50 mg/kg in some sensitive plants; however, some species, such as mushrooms, *Aster* spp. and *Astragalus* spp. (vetches), and other legumes, are able to accumulate very high levels of selenium, up to 1000 ppm, without toxicity (Pendias and Pendias, 1992).

Selenium toxicity in plants is positively correlated with pH, salinity and calcium carbonate in soils (Pendias and Pendias, 1992). Selenium works to protect biological systems against the adverse effects of mercury, cadmium arsenic, thallium, copper, zinc, silver, and various pesticides (Eisler, 2000).

Selenium has a short effectual biological half-life. In voles, the half-life is 13 days and in earthworms 64 days (Eisler, 2000).

Silver. Silver is naturally occurring in soils at concentrations up to 0.5 mg/kg, but has no known biological purpose. It is found in trace concentrations in many organisms; terrestrial plants contain between 0.03 and 0.5 mg/kg DW with higher concentrations in trees and shrubs (Irwin, *et al.*, 1997; Pendias and Pendias, 1992). Nuts, seeds and fruits have higher concentrations than other plant parts (Irwin, *et al.*, 1997).

Uptake in plants is primarily through air-to-leaf transfer rather than through root uptake (ATSDR, 1990b). Silver concentrations in roots are due to soil adsorption rather than uptake (Allen, 2002; Irwin *et al.*, 1997). The amount absorbed in certain species (horsetail, lichen, mosses,

fungi, and some deciduous tress) is related the amount in soil. Concentrations of 5 ppm in tops and 1500 ppm in roots have been documented without toxicity (Pendias and Pendias, 1992).

Silver, along with other metals such as cobalt and copper, may indirectly change cell metabolism, resulting in high cell growth rates. Silver can substitute for potassium in cell membranes, thereby inhibiting absorption of other cations by the roots. Silver precipitates with bacterial proteins to form insoluble complexes with RNA. Silver also binds to sulfhydryl groups (Pendias and Pendias, 1992).

Bioaccumulation and biomagnification of silver is not likely in terrestrial systems due to a low half-life persistence - between 0.1 and 1.6 days. Absorption of any chemical is dependent on its residence time in the GI tract; the transit time of silver in mice is less than eight hours and, when administered orally, is rapidly cleared through the feces with a 99.6% efficiency. Thus, silver has not been detected or detected in negligible concentrations in mammalian tissues (Irwin *et al.*, 1997).

Thallium. Thallium can be bioconcentrated from water or absorbed by plants in soil and enter the terrestrial food chain (ATSDR, 1992e). The amount of thallium uptake by plants is proportional to the thallium concentrations in soil (Adriano, 1986).

In plants, thallium is readily bioaccumulated because it is chemically analogous to potassium. Ratios up to ten have been reported (Adriano, 1986) and accumulations as high as 17,000 ppm have been documented in some species, such as *Galium* sp*. (e.g.,* bedstraw, madder, goosegrass). Wormwood (*Artemisia* sp.) has been observed to accumulate thallium to concentration of 2.8 ppm (ATSDR, 1992e; Pendias and Pendias, 1992). Thallium in pine trees is approximately 2 to 100 ppm with concentration higher in the needles than the stems (Pendias and Pendias, 1992). Some plants contain higher amounts of thallium than other plants *e.g.,* herbage [0.02 - 1.0 ppm DW], edible plants (0.02 – 0.125 ppm DW), and clover (0.008 – 0.01ppm DW)(ATSDR, 1992e; Pendias and Pendias, 1992). However, thallium is not likely to biomagnify in the terrestrial or aquatic food chain (WHO, 1996).

Thallium is taken up by all plant parts but occurs principally in the roots and chlorophyll-containing regions such that oxygen production is reduced and it interferes with pigments

resulting in chlorosis (WHO, 1996). Significant reduction in photosynthesis in corn and sunflowers was noted using a nutrient solution containing two ppm thallium. Other studies found the impairment of chlorophyll syntheses and seed germination, reduced transpiration due to interference of thallium in stomatal processes, growth reduction, stunting of roots and leaf chlorosis (Adriano, 1986), and inhibition of nitrate formation (ATSDR, 1992d). Plant growth can be affected by concentrations of one mg/kg when in the monovalent form (WHO, 1996). Microbial community disturbances have been documented at thallium concentrations between one and ten mg/kg (WHO, 1996).

Thallium has a high degree of bioavailability from all exposure routes in laboratory animals (NIH, 2002). It was formerly used as a rodenticide due to its action to the central nervous system (CNS) and GI tract. Thallium causes loss of dorsal feathers in ducks (concentration not specified) (WHO, 1996).

Vanadium. Whether vanadium is an essential element for plants unknown; however, if so, less than two ppb is the concentration. Vanadium has been shown to stimulate photosynthesis in blue-green algae (Pendias and Pendias, 1992).

In higher plants, average vanadium concentrations are around one ppm DW, most vegetables vanadium concentrations average between less than five to 50 ppm DW. Bryophytes, fungi [mushrooms (e.g., *Amanita muscaria*)] and certain legumes [*e.g*., vetches (*Astralagus sp*.)] have been observed to be vanadium accumulators, at concentrations up to 180 ppm DW. In legumes, vanadium replaces molybdenum as a specific catalyst in nitrogen fixation with rhizobium bacteria; thus, large amounts of vanadium are found in root nodules (ATSDR, 1992f; Pendias and Pendias, 1992).

Bioaccumulation of vanadium is more commonly observed in lower plant phyla than in higher seed-producing phyla. Plants uptake soluble vanadium in above ground parts but at low concentrations. Root concentrations have shown some correlation with soil concentrations (ATSDR, 1992f).

In plants, pentavalent vanadium (V^{5+}) is a potential inhibitor of several enzymes but the tetravalent ion (V^{4+}) does not affect the same enzymes. There are no reports of vanadium toxicity under natural field conditions (Pendias and Pendias, 1992).

Vanadium is present in all mammals; however, tissue concentrations are very low (ATSDR, 1992f) due to low gastrointestinal absorption in animals, e.g., less than 0.1 to 2.6 % in rats. Absorption in rats is higher in young animals due to a greater non-selective permeability in the undeveloped intestinal barrier. Dermal absorption is minimal. Due to low bioavailability, biomagnification of vanadium is unlikely (ATSDR, 1992f).

E2. EFFECTS ON AQUATIC RECEPTORS

This section describes bioavailability of Sauget Site 2 COPECs and their potential for bioaccumulation, biomagnification in soil and possible adverse effects on aquatic receptors, i.e., mink and osprey from ingestion of fish from onsite ponds.

SVOCs

4,6-Dinitro-2-cresol. Dinitrocresols are not readily absorbed in animals as it dissociates readily. Therefore, bioconcentration is not significant (ATSDR, 1995b).

Hexachlorobutadiene. Absorption of hexachlorobutadiene is dose dependent, with lower doses more bioavailable. When pure hexachlorobutadiene was applied to animal skin at a concentration of 388 to 1550 mg/kg), 100% was absorbed. Approximately 85% unmetabolized hexachlorobutadiene was observed when animals were given a higher dose (50 mg/kg). Experiments with oral ingestion of low doses (approximately 1 mg/kg) in animals indicated rapid and complete absorption of hexachlorobutadiene in the GI tract. The kidney is the target organ (ATSDR, 1994).

4-Nitrophenol. Nitrophenol will bioconcentrate in plants and animals (e.g., green algae BCF = 30; fathead minnow BCF = 180). However, in animals, the compound will be eliminated relatively quickly, as demonstrated by a half-life of 150 hours in both terrestrial and aquatic organisms (ATSDR, 1992).

PAHs. In sediments, concentrations of PAHs thought to be acutely toxic have been found to have limited bioavailability due to high K_{oc} factors. Sorption to sediments renders the PAHs less toxic than those in solution (Eisler, 2000).

Various investigations indicate that pitch and/or coke globules from smelters and coal and coal leachates have limited or no bioavailability, do not leach, and are not toxic to aquatic life (Chapman *et al.*, 1996; Paine *et al.*, 1996). Studies from Norway also indicate limited bioavailability of PAHs in sediments originating from smelters (Paine *et al.* 1996).

A study with Great Lakes benthos indicated that the organisms obtain PAHs from water when concentrations of PAHs in sediments are low. When PAH concentrations increase in sediments, benthos obtain PAHs from sediments. Bioconcentration factors increase with increasing K_{ow}, dissolved organic matter, and lipid content (Eisler, 2000).

Many species of aquatic organisms rapidly bioconcentrate PAHs from low concentrations in ambient media. PAH uptake is highly species-specific but greater uptake has been documented in algae, mollusks (Beyer *et al.*, 1996; Eisler, 2000), and other species without PAH-metabolizing enzymes, such as polychaete annelids. Benzo(a)pyrene BCFs for selected macroinvertebrates are 166 (midge), 9 to 236 (clam), 2837 (*D. magna*), 134,248 (*D. pulex*), 5258 (alga), and 82,231 (snail - *Physa*) (Eisler, 2000). Bioaccumulation in mollusks is dependent on a variety of factors such as percent lipid, feeding niche, temperature and season (Beyer *et al.*, 1996). Crustacea assimilate PAHs well due to rapid metabolism and excretion resulting in little potential for food chain biomagnification (Eisler, 2000). PAHs are not evenly distributed within the tissues (Beyer *et al.*, 1996).

PAHs are eliminated primarily through the hepatobiliary system and the GI tract; however, the ability to metabolize PAHs is variable amongst species (Eisler, 2000; Meador *et al.*, 1995). Microsomal oxidases enzyme systems in fish rapidly metabolize PAHs (Irwin, *et al.*, 1997). Fish, mollusks, and most crustacea have the MFO enzyme system similar to terrestrial vertebrates, which can convert PAHs into mutagenic metabolites (Eisler, 2000). However, metabolic rates are much lower in aquatic organisms so the potential for bioaccumulation is greater (Beyer *et al.*, 1996). Higher molecular weight, hydrophobic PAHs (benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene,

chrysene, indeno(1,2,3-cd)pyrene, benzo(ghi)pyrene) do not accumulate in fish (Eisler, 2000) so there is limited exposure to higher trophic level organisms (such as the great blue heron) (Eisler, 2000; McElroy *et al.*, 1989; Suedel *et al.*, 1994)..

Depuration rates also vary widely. Teleosts and arthropods have high depuration rates, *e.g.,* the bluegill sunfish removes 89% of benzo(a)pyrene in four hours and midge larvae can remove 72% of benzo(a)pyrene in eight hours. Conversely, daphnids require 18 hours to remove only 21% of BaP (Eisler, 2000).

Toxicity occurs from PAHs (fluorene, pyrene, benzo(a)pyrene, anthracene) in aquatic organisms when they are exposed to uV radiation and is greatest in crustacea and least in teleosts (Eisler, 2000).

Mallards fed PAHs (naphthalenes, naphthenes, and phenanthrene) at 4000 mg/kg bw exhibited no mortality; however there were increased liver weights and increased blood flow to the liver. Mallard embryos may have microsomal enzymes that metabolize PAHs to a more toxic intermediate that than mammalian embryos and fetuses (Eisler, 2000).

Pentachlorophenol. Bioconcentration occurs in aquatic organisms, not through diet but through food. BCFs in freshwater mussels range from 81 to 461, in carp the BCF is approximately 218 and 3830 in bluegill. However, the compound is rapidly cleared from organisms– approximately 50% in 12 hours. Biomagnification has not been observed (ATSDR, 1994b).

PESTICIDES/HERBICIDES

4,4'-DDE. Despite it's strong adsorption affinity, DDE is rapidly bioconcentrated and biomagnified due to its high lipid solubility and bioavailability. Bioaccumulation has been observed in plankton, insects, mollusks, other invertebrates, and fish (ATSDR, 1994c).

Dieldrin. Dieldrin is rapidly bioconcentrated and biomagnified in aquatic organisms (ATSDR, 1993b).

MCPP. There is a low potential for MCPP to bioaccumulate in fish. The 96-hour LC50 for rainbow trout is 124 ppm and greater than 100 ppm for bluegill sunfish (EXTOXNET, 1993c).

PCBs. PCBs are bioconcentrated in biota with accumulation occurring in higher trophic levels directly from water or through the consumption of contaminated food. BCFs in freshwater species range from 500 to 40,000 for lower chlorinated congeners to 1000 to 300,000 for tetra- to hexachlorinated biphenyls. Higher chlorinated congeners are not bioconcentrated as they cannot pass through the lipid membrane (ATSDR, 2000b).

Mono- through tetrachlorobiphenyls are readily taken and but also readily eliminated and metabolized and thus, are not bioaccumulated to any great extent. Higher chlorinated biphenyls (hepta- through decachlorinated biphenyls) in low environmental concentrations are tightly bound to soils, sediments, or organic matter. These congeners are not significantly bioaccumulated. Penta- hexa-, and heptachlorinated biphenyls are bioavailable, resistant to degradation and bioaccumulate readily (ATSDR, 2000b).

Bioaccumulation of PCBs occurs in the fatty tissues; therefore, those with higher lipid concentration accumulate greater concentrations of PCBs via trophic transfer. The highest bioaccumulation factors (BAFs) occur at the bottom of the food chain but are dependent on the water zone in which the organism feeds and lives. Benthic organisms accumulate PCBs from water at the water-sediment interface and via ingestion of phyto- and zooplankton. Airborne PCBs deposited on surface water create concentrations on the surface microlayer 500 times greater than the rest of the water column and BAFs are higher in fish from the zone (ATSDR, 2000b).

Biomagnification of PCBs occurs from trophic transfer and affects piscivorous birds, such as osprey. However, biomagnification is congener-specific, predominantly with congeners with K_{ow} between 5 and 7 (ATSDR, 2000b).

DIOXINS/FURANS. Lower trophic level organisms (e.g., phytoplankton, aquatic invertebrates, aquatic plants) uptake CDDs from the water column or for the interstitial sediments. Foraging and predatory fish and piscivorous wildlife uptake CDDs through food chain transfer and receive negligible CDD contribution from the water and sediment (ATSDR, 1998).

Piscivorous birds preferentially bioconcentrate and bioaccumulate 2,3,7,8-TCDD and other 2,3,7,8-substituted CDDs/TCDFs. BCFs in aquatic organisms for 2,3,7,8-TCDD has been measured at 37,900 to 128.000; however, the field results or at least two orders-of-magnitude less than the predicted BCFs because some aquatic organisms are able to metabolize and eliminate specific dioxin congeners. The elimination half-lives of TCDD/PeCDD are rapid e.g., 2.6 days for trout fry and three days for minnows. Hx/HpCDD congener elimination half-lives are longer – 16 days for rainbow trout and 20 days for fathead minnows (ATSDR, 1998).

Biota to sediment accumulation factors (BASF) decrease with increasing chlorination and are higher for benthic organisms than for pelagics due to higher lipid content and increased exposure to contaminated sediments (ATSDR, 1998).

Chironomus sp. larvae, *Hexagenia* sp. nymphs, stoneflies, and other predaceous nymphs preferentially store 1,2,6,8-TCDD rather than OCDD. In fish, TCDD is stored in the fat but OCDD is stored preferentially in bile then liver, caeca, kidney, liver, spleen skin then muscle tissue. Differences are due to exposure pathways (diet vs. water) and differences in metabolic breakdown rates (ATSDR, 1998).

METALS

Aluminum. Aluminum is somewhat bioconcentrated in fish; however, as demonstrated in brook trout, whole body concentrations decrease as the fish ages because it is toxic to most fish and shellfish species. Bioconcentration does occur in some aquatic invertebrate species such as snails, crayfish, and insects (mayflies) (ATSDR, 1999).

Antimony. Antimony does not bioconcentrate appreciably in fish and aquatic organisms (ATSDR, 1992a; USEPA, 1988b). No bioconcentration was observed in bluegill sunfish (USEPA, 1988b).

Arsenic. Arsenic will bioaccumulate in aquatic organisms but there is no evidence of biomagnification in the aquatic food chain (Eisler, 2000). In fish, arsenic is bioaccumulated but rapidly excreted; however, the rate of elimination is much slower than the rate of uptake (Baudo *et al.*,1990). The BCF for inorganic trivalent arsenic (As^{3+}) in most aquatic invertebrates and

fish is 17 (Eisler, 2000). BCF ranges were determined at 3 to 30 for fish, 4 to 7000 for algae, 1 to 3 for duckweed, and 110 to 14,500 for lake weeds (Baudo *et al.*, 1990).

Barium. Uptake by fish is an important removal mechanism for barium in the water column. Studies of marine organism indicate marine plants can bioconcentration barium at concentration s1000 times greater than those in the water column (ATSDR, 1992b).

Cobalt. Cobalt compounds are naturally occurring in surface, spring and groundwater. Cobalt can be bioconcentration by aquatic organisms such as mollusks, crustacea and fish. BCFs in freshwater fish range between 40 and 1000 (ATSDR, 1992c).

Mercury. Bioaccumulation in birds occurs in species that eat fish and other birds. Great blue herons collected from the Great Lakes region have body burdens of mercury between 0.7 and 4.3 (FW) mg/kg. Mercury concentrations within birds that eat larger fish are greater than those that eat smaller fish or crustacea. In raptor species such as *Falco* (falcons), *Haliaeetus* (bald eagle), *Buteo* (*e.g.,* red-tailed hawk), and *Accipiter* (*e.g*., sharp-shinned hawk), mercury may take up to 10 years to accumulate in feathers. Molting provides an important depuration process (Eisler, 2000).

Sauget Area 2 Sites Group

July 21st, 2008

Ms. Leah Evison
U. S. Environmental Protection Agency, Region 5
77W. Jackson Blvd. (SR-6J)
Chicago, IL 60604-3590

Re: Sauget Area 2 Baseline Ecological Risk Assessment

Dear Leah:

Attached, please find the July 2008, Sauget Area 2 Sites Baseline Ecological Risk Assessment which has bee revised based on agency comments.

Any questions, please advise.

Sincerely,

Gary Uphoff
By. SD Smith

Gary D. Uphoff
Co-Project Coordinator

Steven D. Smith
Co-Project Coordinator

cc: Distribution List Attached

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